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PERSONAL.

Lieut. Thos. R. Sullivan, First Regiment, and Capt. John A. Laird, Third Regiment, United States Volunteer Engineers, have been honorably discharged.

Mr. C. G. Edwards has been appointed Assistant Engineer, and Mr. Raleigh Thomas, Chief Draftsman, of the Subway Commission of Baltimore, Md.

Mr. J. Robert Fortune, Chief Draftsman of the Murphy Iron Works, Detroit, Mich., has resigned to accept a similar position with the American Stoker Co., New York city.

Mr. Christopher Steadman, civil engineer, on the engineering staff of the State Highway Commission of Massachusetts, was married, Oct. 10, to Miss Lena M. Redmond, of Salem, Mass.

Capt. Jas. G. Warren, Corps of Engineers, U. S. A., has been detailed as Engineer of the Ninth Lighthouse District, with headquarters at Detroit, Mich., to relieve Lieut. Col. Milton B. Adams, Corps of Engineers, transferred.

Mr. H. A. Sumner, Chief Engineer of the Alamogordo & Sacramento Mountain Ry., a subsidiary line of the El Paso & Northeastern Ry., has been appointed Chief Engineer of the latter road also, with headquarters at Alamogordo, N. Mex.

Mr. Thomas E. Inslee, Assistant Superintendent of the foundry of the H. B. Smith Co., manufacturer of steam and water heating apparatus, Westfield, Mass., has resigned, and Mr. Arthur A. Brown, of Champaign, Ill., has been appointed to succeed him.

Mr. Wallace C. Johnson, M. Am. Soc. C. E., Chief Engineer, of the Niagara Falls Hydraulic Power & Mfg. Co., Niagara Falls, N. Y., has been appointed Consulting Engineer of the Shawinigan Water & Power Co., Shawinigan Falls, Que., on the St. Maurice River.

Mr. A. C. Bell, Jun. Am. Soc. C. E., City Engineer of New Orleans, La., has been authorized by the City Council to spend ten days in studying the asphalt pavements of Washington, New York city, Troy, Syracuse, Detroit and Chicago. Mr. Bell was in New York this week for that purpose.

Mr. John Lundie, formerly connected with the Illinois Central R. R., has been appointed Electrical Expert of the Brooklyn Elevated R. R., Brooklyn, N. Y., and will at once begin preparing plans and specifications for the proposed change of motive power from steam to electricity. The cost involved will be about $750,000.

Mr. Leighton Lee, Superintendent of the firm of Lee & Co., engineers and contractors, of Philadelphia, Pa., in attempting to board an elevated train in Chicago, Ill., Oct. 14, after the platform gates had been closed, missed his footing and fell through the trestle work upon a picket fence 25 ft. below. He received injuries that will probably prove fatal.

OBITUARY.

Mr. Edwin Darling, formerly Superintendent of the water-works at Pawtucket, R. I., died recently, aged 64.

Mr. George Wilson Phillips, mechanical engineer and inventor, died at Springfield, Mass., Oct. 14, aged 79.

Mr. James Carmichael, Superintendent of the machine shops of the Harlan & Hollingsworth Co., Wilmington, Del., died Oct. 8, aged 69.

Mr. Charles Edward Widener, civil engineer, of Cumberland, Md., died of pneumonia, Oct. 11, aged 45. He was City Engineer of Cumberland in 1893 and 1897.

Mr. Chas. E. Van Houten, contractor and builder, of New York city, was killed at Jamaica, N. Y., Oct. 13, while walking on the track of the Long Island R. R. He was 79 years of age.

Mr. William W. Boyington, architect, of Chicago, Ill., died at his home in Highland Park, Oct. 16, aged 80. He was the architect of many churches in Chicago and vicinity, of the old University of Chicago and its Observatory, and the Rock Island and Northwestern railway depots.

Mr. John Malcolm Forbes, Sr., President of the Board of Directors of the Chicago, Burlington & Quincy R. R., died at his home, Milton, Mass., Oct. 13. He was born in Bordeaux, France, Feb. 23, 1813, and was brought to this country by his parents while an infant. He became interested in Western railways in 1836, and was for many years President of the Michigan Central R. R., and Chairman of the Board of Directors of the Chicago, Burlington & Quincy R. R.

Mr. William G. Morris, senior member of the firm of Morris & Barlow, malleable iron founders, of Newark, N. Y., died suddenly in Philadelphia, Pa., Oct. 5, while attending the convention of the Foundrymen's Association. He was born in Newark, and began his mechanical career as an apprentice of the late Seth Boyden.

Mr. Frank F. Hemenway, M. Am. Soc. M. E., who for 14 years was connected with the Editorial Department of the "American Machinist," for several years as its Editor-in-Chief, died at his home in Brooklyn, N. Y., Oct. 14. He was born at Hartford, N. Y., Oct. 29, 1837, and served a regular apprenticeship as a machinist in Keene, N. H. For some time following he worked in the Putnam Shops, Fitchburg, Mass., and then at the outbreak of the Civil War he enlisted in the Union Army. After the war he was employed in various machine shops, and about 1870 entered the shops of the Troy & Boston R. R., now the Fitchburg R. R., at Troy, N. Y., where he was associated with the late George W. Richardson. Mr. Hemenway did the work and the experimenting connected with the inventing and the perfecting of the Richardson pop safety valve, and also had much to do with the development of the Richardson balanced slide valve and other inventions. From the railway shops he went to those of Starbuck Bros., Troy, N. Y., and after a year or two became Foreman of the machine shop, holding this position as long as the works continued in operation. While connected with this establishment he invented the Hemenway automatic cut-off engine, and about the same time became a charter member of the American Society of Mechanical Engineers. His literary work began about 1879, when he first contributed to the columns of the "American Machinist," of which he became an associate editor in July, 1881. In 1885 he published his book on the steam engine indicator. He was made Editor-in-Chief of the above periodical in July, 1887, upon the death of Mr. Jackson Baily, and held this position until October, 1894, when he resigned.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

AMERICAN GAS LIGHT ASSOCIATION.
Oct. 19.-21. Annual meeting, Niagara Falls, N. Y. Secy., Alfred E. Forstall, Montclair, N. J.

NEW YORK RAILROAD CLUB.
Oct. 20. "Purchasing Materials," H. B. Hodges. Secy., W. W. Wheatley, 168 Montague St., Brooklyn, N. Y.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.
Oct. 20. Secy., F. A. Charpiot, P. O. Box 13, Savannah, Ga.

THE DETROIT ENGINEERING SOCIETY.
Oct. 21. "Coal-Handling Machinery," C. W. Russell. Secy., Henry Goldmark, Wayne Co. Sav. Bank Bldg., Detroit, Mich.

CHICAGO ELECTRICAL ASSOCIATION.
Oct. 21. "Practical Points on Electrical Measurement," W. B. Hale. Secy., J. R. Cravath, 825 Monodnock Block, Chicago, Ill.

CIVIL ENGINEERS' CLUB OF CLEVELAND.
Oct. 25. Secy., Wm. H. Searles, Case Library Building, Cleveland, O.

FRANKLIN INSTITUTE.
Oct. 25. "Thermo-Electric and Galvanic Action Compared," Chas. J. Reed; "Electric Elevators," Wm. J. Baxter, Jr. Secy., Wm. Wahl, 15 South Seventh St., Philadelphia, Pa.

AMERICAN SOCIETY OF MUNICIPAL IMPROVEMENT.
Oct. 26-28. Annual meeting, Washington, D. C. Secy., D. L. Fulton, Bureau of Highways and Sewers, Allegheny, Pa.

CANADIAN SOCIETY OF CIVIL ENGINEERS.
Oct. 27. Secy., C. A. McNab, 112 Mansfield St., Montreal, Canada.

ENGINEERING ASSOCIATION OF THE SOUTH.
Oct. 27. Secy., C. B. Wilson, 1000 Broad St., Nashville, Tenn.

WESTERN SOCIETY OF ENGINEERS.
Nov. 2. "Construction of Retaining Walls for the Sanitary District of Chicago," James W. Beardsley; "Berthier Method of Coal Calorimetry," Chas V. Kerr; "Brakes for Electric Cars," William G. Price. Secy., N. L. Litten, Monadnock Block, Chicago, Ill.

AMERICAN SOCIETY OF CIVIL ENGINEERS.
Nov. 2. Secy., C. W. Hunt, 220 W. 57th St. New York city.

ENGINEERS' CLUB OF ST. LOUIS.
Nov. 2. Secy., Richard McCulloch, 2401 N. Spring Ave., St. Louis, Mo.

BROOKLYN ENGINEERS' CLUB.
Nov. 3. Secy., A. J. Provost, Jr., 191 Montague St., Brooklyn, N. Y.

TECHNICAL SOCIETY OF THE PACIFIC COAST.
Nov. 4. Secy., O. Von Geldern, 819 Market St., San Francisco, Cal.

ENGINEERS' CLUB OF COLUMBUS.
Nov. 5. Secy., H. M. Gates, 12¼ North High St., Columbus, O.

ENGINEERS' SOCIETY OF WESTERN NEW YORK.
Nov. 7. Secy., H. J. March, Library Bldg., Buffalo, N. Y.

CIVIL ENGINEERS' SOCIETY OF ST. PAUL.
Nov. 7. Secy., C. L. Annan, City Engineer's Office, St. Paul, Minn.

NEW ENGLAND RAILROAD CLUB.
Nov. 8. Secy., Edw. L. Janes, P. O. Box 1158, Boston, Mass.

DENVER SOCIETY OF CIVIL ENGINEERS.
Nov. 8. Secy., W. B. Lawson, 36 Jacobson Bldg., Denver, Col.

RAILWAY SIGNALING CLUB.
Nov. 8. Secy., Earl M. Seitz, Signal Engineer, C. & N. W. Ry., Chicago, Ill.

SOCIETY OF NAVAL ARCHITECTS AND MARINE ENGINEERS.
Nov. 10-11. Annual meeting. Secy., Francis T. Bowles, 12 West 31st St., New York.

ST. LOUIS RAILWAY CLUB.
Nov. 11. "The Performance of a Four-Cylinder Compound Locomotive." Discussion. Secy., H. H. Roberts, 511 Commercial Bldg., St. Louis, Mo.

CENTRAL RAILWAY CLUB.
Nov. 11. Secy., H. D. Vought, 114 Fifth Ave., New York city.

MONTANA SOCIETY OF ENGINEERS.
Nov. 12. Secy., A. S. Hovey, National Bank Bldg., Helena, Mont.

ENGINEERS' CLUB OF KANSAS CITY.
Nov. 14. "Rectification of the Red and Atchafalaya Rivers," A. F. Woolley, Jr. Secy., F. W. Tuttle, Baird Bldg., Kansas City, Mo.

THE LOUISIANA ENGINEERING SOCIETY.
Nov. 14. Secy., J. F. Coleman, 712 Union St., New Orleans, La.

NORTHWEST RAILWAY CLUB.
Nov. 15. Secy., T. A. Foque, Soo Line, Minneapolis, Minn.

ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA.
Nov. 15. Secy., R. A. Fessenden, 410 Penn Ave., Pittsburg, Pa.

ENGINEERS' AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.
Nov. 16. Secy., Frank H. Olmsted, Los Angeles, Cal.

BOSTON SOCIETY OF CIVIL ENGINEERS.
Nov. 16. Secy., S. E. Tinkham, City Hall, Boston, Mass.

WESTERN FOUNDRYMEN'S ASSOCIATION.
Nov. 16. Secy., B. M. Gardner, 1522 Monadnock Block, Chicago, Ill.

ENGINEERS' CLUB OF CINCINNATI.
Nov. 17. Secy., J. F. Wilson, P. O. Box 333, Cincinnati, O.

ENGINEERS' CLUB OF PHILADELPHIA.
Nov. 19. Secy., L. F. Rondinella, 1122 Girard St., Philadelphia, Pa.

TECHNICAL CLUB OF OMAHA.
Nov. 21. Secy., J. Harry Lawrie, Omaha, Neb.

ENGINEERS' CLUB OF MINNEAPOLIS.
Nov. 21. Secy., H. E. Smith, 1620 S. E. 4th St., Minneapolis, Minn.

ENGINEERS' AND ARCHITECTS' CLUB OF LOUISVILLE.
Nov. 21. Secy., Marshall Morris, 16 Norton Bldg., Louisville, Ky.

ST. LOUIS RAILWAY CLUB.—At the meeting held Oct. 14, Prof. C. M. Woodward delivered an address entitled, "What Shall We Do With Our Boys?"

NEW ENGLAND RAILROAD CLUB.—A regular meeting of this club was held at Boston, Mass., on Oct. 11, at which a paper on "Present and Future Economy in Railway Equipment Painting," by Mr. Chas. E. Copp, was discussed.

BOSTON SOCIETY OF CIVIL ENGINEERS.—This society will visit Holyoke, Mass., on Oct. 22, where they will be entertained by the Holyoke Water Power Co. The new dam, the plant of the Deane Steam Pump Co., and other points of interest in the vicinity will be inspected.

BROOKLYN ENGINEERS' CLUB.—A regular meeting of this club was held Oct. 13. Routine business was followed by the appointment of a nominating committee to prepare a list of officers for the ensuing year, and the reading of a paper on "Foundry Moulding Machines for Snap Flask Work," by Mr. Willard S. Tuttle.

FRANKLIN INSTITUTE.—The bulletin for the month of October, issued by the Committee on Meetings, is as follows: Oct. 25, "Thermo-Electric and Galvanic Actions Compared," Charles J. Reed; "Electric Elevators," Wm. Baxter, Jr. Nov. 9, Meeting of the Mining and Metallurgical Section. "Mining and Minting of Gold and Silver," Mr. A. E. Outerbridge, Jr.

AMERICAN SOCIETY OF MUNICIPAL IMPROVEMENTS.—The fifth annual convention of this society will be held in Washington, D. C., Oct. 26-28, as already announced. The program as far as it is at present completed includes the following papers: "Utilization of the Sewage of Vienna, Germany," Capt. L. H. Beach, U. S. A., Wash., D. C.; "Tree Planting in the Streets of Washington" and "A Street Extension Plan for the Entire District of Columbia," Wm. P. Richards, Wash., D. C.; "The Selection of Paving Materials," Geo. W. Tillson, Brooklyn, N. Y.; "The Proper Regulating of Curbing and Streets," Horace Andrews, Albany, N. Y.; "Cost of Repairs to Asphalt Pavements in Buffalo, N. Y.," C. B. Guthrie, Buffalo, N. Y.; "Electrolysis Tests at Dayton, Ohio," Harold P. Brown, New York city.

THE LOUISIANA ENGINEERING SOCIETY.—The regular meeting of this society was held Oct. 11. The evening was devoted to a paper entitled, "Live Engineering Questions of the Hour," by the Secretary, Mr. J. F. Coleman, which was a resumé of local questions, such as river bank protection, sewage disposal and street paving in New Orleans.

One of the causes of caving banks was attributed to underlying strata of quicksand, and some of the methods of overcoming this were described. The drainage question he considered solved by the plan adopted and now being executed by the city. The sewerage question was so nearly akin to drainage that it might be considered part of it. There was, however, a question as to the advisability of discharging sewage into the Mississippi River.

A plan of rearrangement of the track on Canal street was then exhibited and fully discussed.

THE CIVIL ENGINEERS' CLUB OF CLEVELAND.—The regular monthly meeting of this club was held Oct. 11. The discussion upon the proposed amendment to the Constitution, changing the name of the club, was resumed. It was finally moved as an amendment to strike out the proposed term "The Cleveland Society of Engineers" and insert "The Cleveland Engineering Society." This was carried.

Mr. Arthur A. Skeels, member of the club, presented some "Notes and Observations on a Recent Trip Through Mexico." Monterey was described as a most ancient and foreign-looking city. Its water supply is taken from local wells, and its sanitation is exceedingly bad. It, however, has electric lights and street cars hauled by mules.

Guadalajara is the most beautiful town in Mexico; the theater and church are magnificent edifices and not far away are the Falls of Juanacatlan, the largest water falls in Mexico. These falls are utilized for power, and furnish electricity for lighting the city. Wm. H. Searles, Secy.

CHICAGO ELECTRICAL ASSOCIATION.—At the regular meeting of this association, held Oct. 7, Mr. Thos. G. Grier read a paper on "The Use of Electricity in the Spanish-American War."

This was a brief review of the electrical work done along the coast of the United States in connection with submarine mines, range finders for fortifications, etc. The harbor defenses of New York and Boston were described in more detail. The extensive use of the telephone, the use of the X-ray apparatus and other devices on land, and the helm indicators, speed indicators, direction indicators and range finders on shipboard were all interestingly described.

SOCIETY OF NAVAL ARCHITECTS AND MARINE ENGINEERS.—The sixth annual meeting of this society will be held in New York City, at the house of the American Society of Mechanical Engineers, 12 West 31st street, the first session opening at 10 a. m., November 10.

The following are the papers to be read and the topics for discussion: Nov. 10—"Torpedo Boat Destroyers for Sea Service, with Special Reference to the Conditions that Prevail on the Pacific Coast," G. W. Dickie; "The Standard Navy Boats," Arthur B. Cassidy; "Bilge Keels and Rolling Experiments U. S. S. 'Oregon,'" Asst. Naval Constructor Lawrence Spear, U. S. N.; "Steam Economy Test of a Unique Form of Feed Pump," F. M. Wheeler; "Portable Pneumatic Riverters in Shipbuilding," W. I. Babcock. Topical discussion of the following questions: "The utility of Torpedo Boats, and has the Sub-Marine Boat a place?"; "In what respects have the recent Naval Engagements affected opinion as to the value and best distribution of armor for war-ships?" Nov. 11.—"The Steam Yacht as a Naval Auxiliary," William P. Stephens; "Designs of the New Vessels for the U. S. Navy," Chief Constructor Philip Hichborn, U. S. N.; "Methods of Securing Water-tight Work," Asst. Naval Constructor H. G. Smith, U. S. N.; "Tests of the Strength of a Longitudinal Bulkhead Separating Two Engine Rooms," Naval Constructor J. L. Woodward, U. S. N.; "An Electrically Operated 150 Ton Revolving Derrick," Walter A. Post; "Stability of a Battleship under Damaged Conditions," Prof. Cecil H. Peabody. Topical discussions of the following questions: "Under the circumstances of the Blockade at Santiago, which was the more economical method of maintaining the boilers in readiness for immediate action—banking the fires or keeping them spread but very thin?"; "Can you give any data as to the cost in coal of maintaining the engines and boilers in readiness for immediate service?"; "What, if any, difficulty was there in maintaining the supply of fresh water for the boilers, and, if there was any difficulty, to what do you attribute it?"; "As a result of experience on the Blockade, what particular points about the machinery were most likely to give trouble, and what could be done to prevent a recurrence of such trouble?" On the evening of November 11 a banquet will be held at Delmonico's.

AMERICAN RAILWAY ASSOCIATION.—The regular fall meeting was held at the Holland House, New York city, on Oct. 12-13. There were present 100 delegates, representing 95 members. The Executive Committee reported that the membership is now 248 companies, operating 163,000 miles of railway, and also reported in favor of the amendment presented at the last meeting prohibiting voting by proxy at future meetings. This was adopted by the association.

The principal business of this meeting was the consideration of the revision of the Standard Code of Train Rules which was presented by the Committee on Train Rules. The greater part of the two days was devoted to this. Some amendments were suggested and were referred to the committee for consideration, and final action was deferred until the spring meeting. The Committee on Car Service reported in favor of the per diem plan of settling for car interchange between roads at a rate of 15 cts. per day. After some discussion further consideration was postponed until the next meeting.

The Committee on Safety Appliances presented some statistics showing what progress had been made towards the introduction of automatic car couplers and air-brakes and repeated the recommendation made at the meeting of last spring with reference to the restrictions upon the use of power brakes not conforming to the M. C. B. standard of excellence. As this matter was not brought up until the latter part of the last session it was laid over until the spring meeting.

The Committee on the Metric System reported as follows:

> The events of grave and national importance that have transpired during the past six months, which may result in changes in the foreign relations of the country, have been used as an argument by those who favor the adoption here of the Metric System. It is claimed that unless our manufacturers make their goods according to the metric weights and measures they will be handicapped in their competition for foreign markets. If, however, such a demand should arise from any cause, it would be important that our railway officials should know what would be necessary for them to do in making the change.
>
> Your Committee has, therefore, under consideration a plan by which it hopes to be able to report upon the methods which it would be necessary to employ in the introduction of the Metric System in each railway department. This would include an examination into the difficulties to be overcome and the expense involved in changing from one system to another.

In addition the committee presented an abstract of a paper by Mr. Edward Grafstom, of the Pittsburg, Cincinnati, Chicago & St. Louis Ry., giving experience during the adoption of the metric system in foreign countries.

The Committees on Safety Appliances and on Car Service were re-elected.

The date of time table change was fixed as Nov. 13, and the association adjourned to meet in Detroit, Mich., next April.

THE AMERICAN BOILER MANUFACTURERS' ASSOCIATION.—The 10th annual meeting of this association was held, Oct. 3-6, at the Southern Hotel, St. Louis, Mo. The formalities of opening the meeting were pleasantly disposed of, after which attention was for a short time centered upon Secretary E. D. Meier, who read his report and the reports of the various committees. The rest of the morning was devoted to a brief discussion of the report of the committee on Uniform Boiler Specifications, and on Betterment of Business Conditions, both of which were finally assigned for special consideration at following sessions.

On Oct. 4, the consideration of the report of the Committe on Uniform Standard Specifications was resumed, and, after considerable discussion, was finally adopted in the form given elsewhere in this issue. After the appointment of a committee on the next place of meeting the meeting adjourned to the following day.

The forenoon of Oct. 5 was given up to committee reports, and the consideration of applications for membership. Cleveland, O., and the month of July were selected as the place and time of the next meeting.

Mr. E. D. Meier, the secretary, offered his resignation, saying that after nine years in that position he felt it for the best interests of the association to elect a new man to fill the office. His resignation was accepted with general regret.

The following list of officers was then submitted by the Nominating Committee and unanimously elected: Pres., Henry J. Hartley, Philadelphia, Pa.; First Vice-Pres., Daniel Connally, Cleveland, Ohio; Second Vice-Pres., John O'Brien, St. Louis, Mo.; Third Vice-Pres., R. D. Monroe, Jr., Pittsburg, Pa.; Secy., J. D. Farasey, Cleveland, Ohio; Treas., Richard Hammond, Buffalo, N. Y.

The session of the last day was brief, and was devoted to various unfinished business and minor matters. Immediately after adjournment those present witnessed a practical boiler test at the John O'Brien Boiler Works. This boiler was a horizontal tubular boiler, 14 × 5 ft., with 50 tubes, made of ⅝-in. steel, with a tensile strength of 55,000 lbs., intended to work at pressures below 200 lbs., 400 lbs. per sq. in. caused considerable leakage at the rivets, 600 lbs. increased the leakage so that the boiler was almost hidden by the spray. At 660 lbs. per sq. in. an expansion of over 3 ins. was observed.

The afternoons of the convention days were devoted to inspection tours, the Anheuser-Busch Brewing Co., the city water-works and other points of interest being included.

NEW PUBLICATIONS.

REPORT OF ONTARIO BUREAU OF MINES, Vol. VII., Third Part, 1898. Printed by order of the Legislative Assembly of Ontario. Toronto. Paper; 9¾ × 6½ ins.; pp. 207 to 265.

The bulk of this report is taken up in the location of corundum deposits in Ontario, its analyses and concentration. Short reports follow upon the water powers of Ontario; placer gold on Vermillion River, and mining schools and mining classes.

SURFACE PLANTS OF BITUMINOUS COLLIERIES AND COKE WORKS. Wilkins & Davison, Civil Engineers, Pittsburg, Pa. Pamph.; 6 × 9 ins.; pp. 43.

This pamphlet is a reprint of several illustrated articles that have appeared in "Mines and Minerals" and in the "American Manufacturer," describing head shafts, tipples and coke plants that have been designed and erected by Messrs. Wilkins & Davison. The illustrations are excellent, and the articles should be of interest to owners and managers of coal mines.

STREET RAILWAY FRANCHISES AND OPERATIONS IN CHICAGO.—Report of a Special Committee of the City Council; Chairman, Carter H. Harrison (Mayor); Secretary, George G. Hooker. Cloth; 8vo.; pp. 313; numerous folding tables and a map.

A special committee to investigate the franchises, financial operations, and wages paid by the street railway companies, was appointed in October, 1897, and made its report in March, 1898, but the report has only recently been issued. The report is unfriendly to the companies, but contains much interesting and important information.

PUBLIC WATER SUPPLIES.—Address by Judge George Hillyer, President Water Board, Atlanta, Ga., before the Detroit Convention of the League of American Municipalities, Aug. 3, 1898. Reprinted from "City Government" of August, 1898, by the New York Filter Mfg. Co., 26 Cortlandt St., New York. Paper; 4 × 7 ins.; pp. 12.

Although this pamphlet is being distributed for advertising purposes it was not written with that end in view. It describes the water-works of Atlanta, and the benefits of meters, filtration and municipal ownership, as seen by the author and shown by the official records. It makes an especially strong showing for the use of meters and indicates that without them filtration might be out of the question.

REPORT OF THE RAILWAY COMMISSIONERS FOR NEW SOUTH WALES, AUSTRALIA.—Paper; 8vo.; pp. 39; maps and diagrams.

This colony has 2,691 miles of railway, all owned by the government, and in the year ending June 30, 1898, the total earnings amounted to $15,133,740, while the total expenditures were $8,073,025. The operating expenses were 53.34% of the gross earnings. During the year, meetings of the premiers and the railway commissioners of the several colonies were held to consider the question of establishing uniform gage, and thus eliminating the present troubles incident to break of gage. The tramways and street railways of Sydney (which are also owned by the government) aggregate 65 miles, operated partly by cable and partly by electricity.

ORES OF NOVA SCOTIA; Gold, Lead and Copper.—E. Gilpin, Jr., LL.D., F. R. S. C., Inspector of Mines, Halifax, N. S. Pamph.; 6½×10 ins.; pp. 46; with map.

This report contains in abbreviated form the most important facts, collected from public and private sources, relating to the gold, lead and copper deposits of Nova Scotia. The lead and copper deposits are as yet undeveloped, but they are said to be widespread and promising. The gold fields became known about 1860, and many mines were started in the next ten years, most of which were unprofitable, but recently there has been quite a revival, and veins and deposits are being profitably worked, on business principles, which a few years ago would have been spurned. Local investors are now able to mine and mill quartz profitably on a small scale, when the crushed quartz does not yield over $2 of free gold per ton. The gold production of Nova Scotia since 1862 has amounted to over $12,000,000, averaging about $12 per ton of crushed quartz.

THE COLUMBIA ENGINEER.—Transactions of the Engineering Society of Columbia University, New York. Published by the Society. Cloth; 7 × 10 ins.; pp. 158; illustrated.

This is the annual proceedings of the Engineering Society of Columbia University. The following is a list of the papers contained "Some Details of Rapid Transit," Wm. Barclay Parsons; "Some Reservoirs Which I Have Seen," J. James R. Croes; "Subterranean Temperatures," Prof. William Hollock; "Sewage Disposal," Col. George E. Waring, Jr.; "Engineering Features of the Nicaragua Canal Problem," Foster Crowell; "Interpretations of Water Analyses," George C. Whipple; "Treatment of Steel for Car Axles," L. R. Pomeroy; "Masonry," George S. Morison; "Railroad Accidents and Their Prevention," Col. H. G. Prout; "Heating and Ventilation of Buildings at the New Site of Columbia University," George A. Suter; "New and Old Systems of Power Distribution in Factories," Gano S. Dunn; "Improved Canal Facilities Between Lake Erie and New York City," Prof. William H. Burr; "The Inspection of the Materials of Engineering," P. S. Hildreth.

TWELFTH ANNUAL REPORT OF THE COMMISSIONER OF LABOR, 1897.—Economic Aspects of the Liquor Problem. Washington Government Printing Office: Cloth; 8vo.; pp. 275.

The Department of Labor has been engaged during the past year in investigating the effect of machinery upon labor and the cost of production, and has also carried on an investigation relating to municipal and private gas, electric and water plants, besides the investigation into the liquor question, to which latter subject the whole of the present report is devoted. The reports on the other subjects are, as yet, incomplete, and their publication is postponed to a later date. The report on the economic aspect of the liquor problem includes statistics of manufacture; importation, distribution and sale; consumption; revenue, national, state and municipal; capital invested and labor employed; experience and practice of employers in regard to use of intoxicants by their employees; recommendations from employers in regard to means to be adopted for lessening the consumption of liquors; and a digest of the liquor laws of the several states and territories. It appears that there was a considerable decrease in the per capita consumption of liquors in the United States from 1893 to 1896, as shown in the following figures, in gallons per capita: Distilled spirits, from 1.51 to 1.00; wines, 0.48 to 0.26; malt liquors, 16.08 to 15.16; total, 18.07 to 16.42. Whether this was due to decreasing appetites or to the hard times is not stated. A comparison of the figures of 1880 and 1890 shows a great increase in the drinking, which may be a result of increasing capacity to purchase, or of increasing appetite, or both. The figures for these years are: Distilled spirits, 1.27 to 1.40; wines, 0.56 to 0.46; malt liquors, 8.26 to 13.67; total, 10.00 to 15.53. The report is a magazine of information from which the student of the liquor question, the political economist and the legislator may draw their own conclusions.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3 1-2 x 6 ins.; 6 x 9 ins., and 9 x 12 ins.)

COMBINATION STOVE AND FURNACES.—The National Pipe Bending Co., New Haven, Conn.

This is a circular briefly describing a form of stove and furnace for water and air heating of houses.

POLYPHASE INDUCTOR GENERATORS.—Westinghouse Electric & Mfg. Co., Pittsburg, Pa. Circular; 7 × 10 ins.; illustrated.

This is circular 201 of the Westinghouse series. It illustrates and briefly describes the type of generator in which the armature and field is stationary and the moving part is reduced to a star-shaped rotating piece of iron with no moving wire. These machines are manufactured in sizes ranging from 180 to 750 K-W., either belted or direct connected.

LONG-BURNING ARC LAMPS.—For Direct and Alternating Current Circuits.—Circular 202 calls attention to some of the latest forms of arc lamps on the market. They are of the enclosed type for use on 110-volt circuits with a burning limit per trimming of about 100 hours. Other types are shown and described, and some information regarding globes, carbons, etc., is given.

CONCRETE MIXERS.—The Contractors' Plant Co., 85 Water St., Boston, Mass. Paper; 5 x 7 ins.; pp. 11; illustrated.

This pamphlet describes a portable mixer, in which the mixing is done while the material passes through the device by gravity.

ELECTRIC RAILWAY GENERATORS.—Walker Co., Cleveland, Ohio. Pamph.; 8 x 10⅞ ins.; illustrated.

In this circular, which is number 1082 of the Walker series, the requirements of a modern street railway generator are outlined, and the manner in which the apparatus manufactured by this company fulfills these requirements is fully explained.

THE AMERICAN FEED WATER HEATER.—The Whitlock Coil Pipe Co., Elmwood, Conn., U. S. A. Pamph.; 3½ x 6 ins.

This is a small pamphlet outlining the construction of the American feed water heater and describing briefly the advantages accruing from the use of feed water heaters in general.

TELEPHONY.—The International Correspondence Schools. Scranton, Pa. Pamph.; 4 x 6½ ins.; pp. 30.

This is a brief synopsis of the course in telephony recently established by this school. It is divided into three parts: Principles, Apparatus and Circuits; Telephone Exchanges and Systems; and Telephone Lines and Their Construction.

RUBBER GOODS.—The Mechanical Rubber Co., Chicago, Ill. Pamph.; 5½ x 8½ ins.; pp. 76.

In this pamphlet is given a complete illustrated list of rubber goods such as: general belting, concentrator belts, hose for water, steam and air, and a great variety of rubber goods for mechanical purposes.

THE NATIONAL FEED WATER HEATER.—The National Pipe Bending Co., New Haven, Conn. Pamph.; 3½ x 6 ins.

This is an attractive little pamphlet calling attention to the merits of the National Feed Water Heater. In addition, tables and illustrations afford an idea of the construction and dimensions of the several types manufactured.

GRINDING AND POLISHING MACHINERY.—Builders' Iron Foundry, Providence, R. I. Pamph.; 3½ x 6 ins.; pp. 112.

The Builders' Iron Foundry has added to its extensive foundry and machine business a department for the manufacture of grinding and polishing machinery, countershafts and wood polishing wheels. The pamphlet is an illustrated catalogue and price list of productions in this line.

THE NATIONAL FEED WATER HEATER.—The National Pipe Bending Co., New Haven, Conn. Pamph.; 3¼ x 6 ins.; pp. 60.

This little pamphlet starts with the statement given on the cover, "Our Record 700,000 HP." and in the following 60 pages gives the names and addresses of some of the manufactories, power plants, etc., using "National" feed water heaters and included in the total.

THE CORRESPONDENCE SCHOOL OF SHEET METAL PATTERN DRAFTING.—The International Correspondence Schools, Scranton, Pa. Pamph., 6 x 9 ins.; pp. 88.

This pamphlet contains information on the correspondence method of teaching the subject of drafting for sheet metal workers, which has for some time been one of the many courses of study taught by the International Correspondence Schools.

STREET RAILWAY TRACK.—Lap-Joint Railway Track Co., Bowling Green Building, New York. Paper; 6 x 9¼ ins.; pp. 11.

This pamphlet describes the built-up or compound rail systems invented by Mr. T. H. Gibbon, Chief Engineer of the company, and used in combination with metal ties or chairs. The track has been laid in Albany, Fulton and Brooklyn, N. Y. It was described in our columns some time ago.

THE GENERAL ELECTRIC CO. AT OMAHA.—The General Electric Co., Schenectady, N. Y. Pamph.; 5¼ x 7¾ ins.; illustrated.

This is an attractive little pamphlet from the press of the General Electric Co., in which is given a series of characteristic illustrations of its apparatus, including arc lamps, and generators, single phase, polyphase and monocyclic generators, transformers, street-car motors and controllers and various other apparatus.

MAIL CHUTING.—An Occasional Brochure. Part Two. The Cutler Mfg. Co. Rochester, N. Y. Five engraved sketches by Henry P. Kirby; 8 x 10 ins.

The "mail chute" is in common use in office and public buildings, for dropping letters from the several upper floors to a mail box on the ground floor. The Cutler Mfg. Co. has chosen an odd way to advertise its business, but a very good one. The sketches have nothing to do with mail chuting, but represent specimens of cathedral and other Gothic architecture.

COMBINED SIDEWALK AND VAULT ROOF.—P. H. Jackson & Co., 228 First St., San Francisco, Cal. Photograph, backed with circular.

This is a view taken beneath the sidewalk of a building in San Francisco where use has been made of Jackson's combined artificial stone sidewalk and galvanized corrugated steel roof for vaults. The total thickness is less than 4 ins., making a form of construction readily adaptable to limited vertical spaces.

THE CORRESPONDENCE SCHOOL OF PEDAGOGY.—The International Correspondence Schools, Scranton, Pa. Pamph., 6 x 9 ins.; pp. 72.

This pamphlet is a "circular of information" describing a system of home study in the pedagogies of arithmetic, grammar, history, orthography, geography, civics and rhetoric. The course of study is intended to take the place of the training received in normal schools, and is especially recommended to those now engaged in teaching.

STEAM BOILERS, FOUNDRY CUPOLAS, ETC.—The Bigelow Co., New Haven, Conn. Pamph.; 9¼ x 11½ ins.; pp. 32.

This is an illustrated descriptive list of the various forms of steam boilers and boiler appurtenances manufactured by the Bigelow Co., and includes return tubular boilers for high or low pressure services, sparkless boilers, locomotive boilers and the Bigelow-Manning vertical tubular boiler. In addition, packing house apparatus, such as dryers, digesters and coolers and foundry cupolas, tuyer plates, forges, etc., manufactured by this company, are mentioned.

ORE AND ROCK CRUSHERS; SCREENING AND CONVEYING MACHINERY. Earle C. Bacon, Engineer, Havemeyer Building, New York. Farrel Foundry & Machine Co., Ansonia, Conn. Pamph; 7½ x 9¾ ins.; pp. 74.

This pamphlet is a very complete illustrated catalogue and price list of crushers of the Blata and other patterns, crushings rolls, revolving screens, bucket and rubber belt conveyors, chute gates, etc. Sectional drawings and photographs of many complete screening and crushing plants are given.

WOOD'S WATER TUBE SAFETY BOILERS.—New Haven Boiler Works, New Haven, Conn. Pamph., 9¼ x 11½ ins.

This pamphlet is made up of a number of illustrations of details of the Wood's Water Tube Safety Boiler and an accompanying description, in which such matters as circulation of water, rapid steaming, dry steam, accessibility for cleaning and repairs, capacity, etc., are treated. There is also included a set of directions for operating the boiler and a partial list of users.

POWER AND ELECTRIC PUMPS.—The Goulds Mfg. Co., Seneca Falls, N. Y. Paper; 7 x 7 ins.; pp. 20; illustrated.

One of these catalogues describes a variety of power pumps, including those for water supplies, boiler feeding and hydraulic power. The other is devoted to electric pumps for house supplies, both on the open and closed tank systems; and to electric pumps for a variety of other purposes, including supplies for hydraulic elevators, boilers, fire protection, mines, fountains, villages and supplementary service for cities.

PUMPS, GOVERNORS, VALVES.—The Gardner Governor Co. Quincy, Ill. Pamph.; 7¾ x 5¼ ins.; pp. 21.

The Gardner governor was first made in 1860, and its total sales to date are upwards of 135,000. Four styles are illustrated in this catalogue, two of them having springs in addition to the revolving balls, making them suitable for high-speed engines. The Gardner pump is of the direct-acting, duplex type. It is made in various styles and sizes. The catalogue also shows a pump governor, a balanced lever valve, and globe and angle valves.

THE GENERAL ELECTRIC AT BOSTON.—The General Electric Co., Schenectady, N. Y. Pamph.; 5¼x7¾ ins.; pp. 66; illustrated.

This is one of the neatest pamphlets that has come to our attention in some time. It was published for distribution at the American Street Ry. Convention, held in Boston, Sept. 6-9, and contains descriptions of the various street railway plants of the city and vicinity. A considerable proportion, however, is given up to descriptions of the many points of interest and the best routes for sight-seers to follow.

ELECTRICITY FOR MACHINE DRIVING.—Westinghouse Electric & Mfg. Co., Pittsburg, Pa. Pamph.; 6 x 9 ins.; illustrated.

This is a brochure pointing out in a brief manner a few of the advantages secured by using separate electric motors in place of long lines of shafting and the usual system of belting. A list of industries to which electric motors are applicable and the advantages to be derived are given, the latter being subdivided into such topics as reliability, convenience and flexibility, saving of power, sanitary improvements, increased output, etc.

ARMOR-PLATE.—The Carnegie Steel Co., Limited, Pittsburg, Pa. Cloth; 12¾ x 9¼ ins.; pp. 73, of photogravures and text.

This handsome publication, printed in both English and French, illustrates and briefly describes the armor-making plant of the Carnegie Steel Co.; presents views of a large number of the new ships of the United States Navy, and shows the results of ballistic tests of armor-plate of various forms and thicknesses made by this firm. The text accompanying these plates gives the location, date and conditions of each test, and the results for each round.

SURFACE CONDENSERS; COOLING TOWERS; FEED-WATER HEATERS.—Wheeler Condenser & Engineering Co., 120 Liberty St., New York. Three pamphlets; 6 x 9 ins.; pp. 30, 16, 19.

These three pamphlets contain illustrated descriptions of several styles of the "Wheeler" surface condensers and feed-water heaters, and of the "Barnard" cooling tower, used for cooling the circulating water discharged from surface condensers. In this tower the water is cooled by passing down over a series of vertical galvanized steel wire mats while a current of air is blown upward through the mats by means of a fan.

CORLISS AND COLUMBIA ELECTRIC ENGINE STOPS.—Springfield Engine Stop Co., Springfield, Mass. Circular; 6 x 9 ins.; also a pamphlet, 8¼ x 5 ins.

These are brief descriptions of a form of electric engine stop which consists of a small steam cylinder, controlled by an electrically operated valve, whose function is to raise the side rod of the Corliss governor, thus lifting the governor balls and preventing the grab hooks from opening the main engine valves. The electric valve can be operated from any point by pressing a button. Reasons for employing an engine stop and several letters from users are included.

GRANITE ROCK WOOL.—American Insulating Material Mfg. Co., 215 North Third St., St. Louis, Mo. Paper, 7¾ x 10¾ ins.; pp. 32.

This material is said to be made by converting granite rock to a fibrous condition, and is claimed to be superior to the ordinary mineral wool made from furnace slag in its freedom from acids and impurities. It is adapted for boiler and pipe coverings, for sound deadening and heat insulation in all classes of building, and especially in cold storage warehouses, ice houses, etc., and in passenger car and refrigerator car construction. An analysis is given showing that the material is free from sulphuric acid and contains much less alumina and iron oxide than mineral wool. It weighs about 7 lbs. per cu. ft., and is sold put up in burlap bags at $30 per ton of 2,000 lbs. The material is also used for the filtration of water, and is made up in sectional forms for use in boilers, steam pipes, brine tanks, etc.

POWER TRANSMISSION AND CONVEYING MACHINERY.—The Link Belt Machinery Co., Chicago, Ill. Paper; 6 x 9 ins.; pp. 300; illustrated.

This catalogue replaces all previous catalogues of the above-named company's products in standard conveying, hoisting and power transmission machinery. It illustrates and describes briefly complete plants and separate machines, fittings and supplies for conveyors, elevators, coal screening and washing machinery; coal and ash handling plants; cane conveyors, granulators, strainers, etc., for sugar refineries and plantations; packing house elevators and conveyors; grain elevator and flour mill conveying and packing machinery; barrel and bottle washing and conveying machinery for breweries, malt houses and distilleries; conveyors for fish, fruit and vegetable canneries, log hauls, conveyors and elevators for saw mills, etc., etc. The book is handsomely printed and illustrated and is provided with an adequate index.

SUPPLEMENTARY GAS FUEL FOR STEAM BOILERS.—Economy Mfg. Co., New York. Pamph.; 7 x 10 ins.; pp. 16.

This pamphlet describes W. L. Teter's patent system for "perfecting the combustion of coal" under steam boilers. A retort formed of a coil of 2-in. pipes is placed just back of the bridge wall, and into it is carried a current of steam and a small quantity of oil which is fed in drop by drop. The mixture of superheated steam and petroleum vapor is taken from the retort to a series of pipes which are placed parallel to and a short distance below the grate bars. These pipes are perforated with a number of small holes, which serve to distribute the steam and vapor uniformly under the grates. An increase of from 20 to 40% in efficiency is, of course, claimed for this device, and a $500,000 company has been formed to exploit it. Whatever merit this device has is probably due to its discharging steam under the grate, which may prevent the formation of clinker and improve the draft, but this is not new nor patentable.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work. Place.	See Eng. News.
Oct. 20.	Viaduct over Lick Run, Cincinnati, O.	Sept. 22
Oct. 20.	Greenhouses, etc., New York, N. Y.	Oct. 13
Oct. 20.	Brick chimneys (3), Buffalo, N. Y.	Oct. 13
Oct. 20.	Bridge, 150-ft. span, Jackson, W. Va.	Oct. 13
Oct. 20.	Electric conduits, Erie, Pa.	Oct. 13
Oct. 20.	Asylum building, Newark, N. Y.	Oct. 13
Oct. 20.	Water pipe, etc., New York, N. Y.	Oct. 13
Oct. 20.	Macadam road, Enfield, Mass.	Oct. 13
Oct. 20.	Water-works, Shawnee, Okla.	Oct. 13
Oct. 20.	Electric light bonds, Grafton, W. Va.	Oct. 6
Oct. 20.	Steam heating, etc., York, Pa.	Oct. 6
Oct. 20.	Cottage, Lancaster, O.	Oct. 6
Oct. 20.	Levee work, New Orleans, La.	Oct. 20
Oct. 20.	Highway (3,000 lin.ft.), Sudbury, Mass.	Oct. 20
Oct. 20.	New Lebanon road, New Lebanon, N.Y.	Oct. 20
Oct. 20.	Pumping engine, Fort Wayne, Ind.	Oct. 20
Oct. 20.	Bridge approach, Kansas City, Mo.	Oct. 20
Oct. 21.	Granite walks, St. Louis, Mo.	Oct. 20
Oct. 21.	Grading, Terryville, Conn.	Oct. 20
Oct. 21.	Grading, paving, etc., Dayton, O.	Oct. 20
Oct. 21.	Brick sewer, Memphis, Tenn.	Oct. 20
Oct. 21.	Wire (750 miles), Washington, D. C.	Oct. 20
Oct. 21.	Interior finish, Columbus, Ga.	Oct. 13
Oct. 21.	Paving, Buffalo, N. Y.	Oct. 13
Oct. 21.	Sewer pipe, cement, etc., Newton, Mass.	Oct. 13
Oct. 21.	Levee work, West Memphis, Tenn.	Sept. 22
	Advertised, Eng. News, Sept. 22 to Oct. 13.	
Oct. 22.	Electric lighting, heating, etc., Buffalo, N.Y.	Oct. 13
Oct. 22.	Electric light plant, Port Royal, S. C.	Oct. 13
Oct. 22.	Drainage, Harvel, Ill.	Oct. 13
Oct. 22.	Dredging at navy yard, Brooklyn, N.Y.	Oct. 13
Oct. 22.	Sewers, Washington, D. C.	Oct. 13
Oct. 22.	Pipe sewers, Lebanon, O.	Oct. 13
Oct. 22.	Iron bridges (2), Salem, Va.	Oct. 6
Oct. 22.	Bridge, plans and material, Cincinnati, O.	Sept. 29
Oct. 22.	Electric plant, Litchfield, Ill.	Sept. 29
Oct. 22.	Dredging, Pensacola Bay, Fla.	Sept. 29
	Advertised, Eng. News, Sept. 29 to Oct. 13.	
Oct. 22.	Grading, North Main St., Thomaston, Conn.	Oct. 20
Oct. 22.	Grading Michigan Ave., Washington, D. C.	Oct. 20
Oct. 22.	Heating, plumbing, etc., Bath, N. Y.	Oct. 20
Oct. 22.	Electric plants (2), Boston, Mass.	Oct. 20
Oct. 22.	Laying water mains, Amsterdam, N. Y.	Oct. 20
Oct. 22.	Extending water mains, Bremerton, Wash.	Oct. 20
Oct. 22.	Fire alarm system, Mobile, Ala.	Oct. 20
	Advertised, Engineering News, Oct. 20.	
Oct. 22.	Bonds, Troy, O.	Oct. 20
Oct. 24.	Markets, etc., Belem, Brazil.	Apr. 28
Oct. 24.	Paving with asphalt, etc., Hamilton, O.	Sept. 29
Oct. 24.	Water-works, Gallipolis, O.	Sept. 29
Oct. 24.	Heating plant, St. Peter, Minn.	Sept. 29
Oct. 24.	Storage reservoir, Bradford, Pa.	Oct. 6
	Advertised, Eng. News, Oct. 6 and 13.	
Oct. 24.	Fire engine house, Chicago, Ill.	Oct. 13
Oct. 24.	Elevators (3), New York, N. Y.	Oct. 13
Oct. 24.	Sewers, Toledo, O.	Oct. 13
Oct. 24.	Sewers, (3¼ miles), Whiting, Ind.	Oct. 13
Oct. 24.	Brick paving, Toledo, O.	Oct. 13
Oct. 24.	Highway, Rochester, Mass.	Oct. 20
Oct. 24.	Grading, etc., Main St., Woodbury, Conn.	Oct. 20
Oct. 24.	Brick paving, etc., Louisville, Ky.	Oct. 20
Oct. 24.	Paving bonds, Cambridge, O.	Oct. 20

Oct. 24. Sidewalk bonds, Richwood, O. ....Oct. 20
Oct. 24. Paving, Indianapolis, Ind. ....Oct. 20
Oct. 24. Electric and gas light fixtures, New York....Oct. 20
Oct. 24. Water pipe, Deadwood, S. Dak...............Oct. 20
Oct. 24. Plumbing, repairs, etc., Binghamton, N. Y...Oct. 20
Oct. 25. Paving bonds, Salem, O. ....Oct. 20
Oct. 25. Electric plant, Chicago Junction, O. ....Oct. 20
Advertised, Engineering News, Oct. 20.
Oct. 25. Flood gates, Dayton, O. ....Oct. 20
Oct. 25. Sewers, Rockford, Ill. ....Oct. 13
Advertised, Engineering News, Oct. 13.
Oct. 25. Viaduct approaches, Nashville, Tenn. ......Oct. 13
Advertised, Engineering News, Oct. 13.
Oct. 25. Sewers, Tampa, Fla. ....Oct. 13
Advertised, Eng. News, Oct. 13 and 20.
Oct. 25. Pipe sewer, Huntington, Ind. ....Oct. 13
Oct. 25. Water filter, Ashland, Wis. ....Oct. 13
Oct. 25. Jetties, Portland, Ore. ....Aug. 25
Advertised, Eng. News, Aug. 25 to Sept. 15.
Oct. 25. Brick paving, etc., Tampa, Fla. ....Oct. 13
Advertised, Eng. News, Oct. 13 and 20.
Oct. 25. Street bonds, Oakland, Md. ....Oct. 13
Oct. 25. Brick sidewalk, Huntington, Ind. ....Oct. 13
Oct. 26. Addition to water-works, Norfolk, Va. ......Oct. 13
Advertised, Eng. News, Oct. 13 and 20.
Oct. 26. Bridge bonds, Cincinnati, O. ....Sept. 29
Oct. 26. Dredging, Newport, R. I. ....Sept. 29
Advertised Eng. News, Sept. 29 to Oct. 20.
Oct. 26. Cement, broken stone, etc., Newport, R. I...Sept. 29
Advertised Eng. News, Sept. 29 to Oct. 20.
Oct. 26. Sewer bonds, Glenville, O. ....Oct. 6
Oct. 26. Asphalt paving, Marshall, Mo. ....Oct. 20
Oct. 26. Brick sewer, Buffalo, N. Y. ....Oct. 20
Oct. 26. Pig lead, (150 tons), Baltimore, Md. ....Oct. 20
Oct. 26. Bridge, Eau Claire, Wis. ....Oct. 20
Oct. 26. Combination bridges, Unionville, Mo. ......Oct. 20
Oct. 26. School building, Laharpe, Ill. ....Oct. 20
Oct. 26. Sewers, Hoboken, N. J. ....Oct. 20
Oct. 26. Ladder truck and boilers, New York, N. Y...Oct. 20
Oct. 26. Wharf, dredging, etc., St. John, N. B.......Oct. 20
Oct. 27. Macadamizing, etc., Findlay, O. ....Oct. 20
Oct. 27. Building, Central Islip (L.I.), N. Y. ....Oct. 20
Oct. 27. Heat'g, plumb'g, etc., Ward's Isld., N. Y. H..Oct. 20
Oct. 27. Building substructure, Boise, Mont. ......Oct. 20
Oct. 27. Stone, Brooklyn, N. Y. ....Oct. 20
Oct. 27. Asphalt paving, Winnipeg, Man. ....Oct. 20
Oct. 27. U. S. building, Camden, N. J..................Oct. 6
Advertised, Eng. News, Oct. 6 and 13.
Oct. 27. Paving, Camden, N. J...........................Sept. 29
Oct. 27. Electrical machinery, Hull, England. ......Oct. 13
Oct. 28. Heating plant, Genoa, Neb. ....Oct. 13
Oct. 28. Pipe sewer, Monticello, Ind. ....Oct. 13
Oct. 28. Asphalt, brick or stone, Atlanta, Ga.........Oct. 6
Oct. 28. Brick paving, etc. (7 Sts.), Cleveland, O. ....Oct. 6
Oct. 28. Brick and stone wall, Atlanta, Ga. ....Oct. 6
Oct. 28. Stone wall, San Francisco, Cal...............Oct. 6
Oct. 28. Grading and paving, New Orleans, La. ......Oct. 20
Oct. 28. Cement sidewalks, Chicago, Ill. ....Oct. 20
Oct. 28. Pipe sewers, Chicago, Ill. ....Oct. 20
Oct. 28. Laying water mains, Chicago, Ill. ....Oct. 20
Oct. 29. Brick paving, Olean, N. Y......................Oct. 20
Advertised, Engineering News, Oct. 20.
Oct. 28. Macadam, curb, etc., Warren, O...............Oct. 20
Oct. 28. Drill hall, Kingston, Ont. ....Oct. 20
Oct. 29. Electric traveling crane, Norfolk, Va. ......Oct. 20
Oct. 29. Steam tender, Louisville, Ky. ....Oct. 6
Oct. 29. Grading and brick paving, Cleveland, O.....Oct. 13
Oct. 29. Grading and cement walks, Irvington, Ind. ..Oct. 13
Oct. 30. School building, Chehalis, Wash. ....June 16
Oct. 31. Metal work, Mobile, Ala. ....Oct. 13
Advertised, Eng. News, Oct. 13 and 20.
Oct. 31. Pumping engine (3,000,000 galls.), Marietta, O. Oct. 20
Oct. 31. Electric bonds, Winnebago City, Minn.......Oct. 20
Nov. 1. Road bonds, Utica, N. Y. ....Oct. 20
Nov. 1. Water pipe (20,000 ft.), Spring Lake, N.J...Oct. 20
Advertised, Engineering News, Oct. 20.
Nov. 1. Pipe sewers (4,600 ft.), Spring Lake, N.J...Oct. 20
Advertised, Engineering News, Oct. 20.
Nov. 1. Arc lighting, Hull, Que..........................Oct. 20
Nov. 1. Hospital plans, New York, N. Y..............Oct. 13
Nov. 1. Bridge, Corydon, Ia. ....Oct. 13
Nov. 1. Artesian well, Jamestown, N. Dak............Oct. 13
Nov. 1. Sidewalks, Terre Haute, Ind. ....Oct. 13
Nov. 1. Court house, Garner, Ia. ....Sept. 8
Nov. 1. School building, St. Louis, Mo................Sept. 22
Nov. 2. Heating, etc., Baltimore, Md. ....Oct. 20
Nov. 2. Electric lighting, etc., Baltimore, Md.........Oct. 20
Nov. 2. Harbor work, Stockton, Cal. ....Oct. 20
Nov. 3. U. S. building, Chicago, Ill. ....Oct. 20
Advertised, Eng. News, Oct. 20 and 27.
Nov. 3. Roads, walks, etc., Fort Hancock, N. J. ....Oct. 20
Nov. 3. Highway work, Pittsburg, Pa....................Oct. 20
Nov. 3. Repairing sidewalks, Cincinnati, O..........Oct. 13
Nov. 4. Piers and abutments, Coshocton, O. ....Oct. 13
Nov. 5. Substructure, Center St., Cleveland, O......Oct. 13
Nov. 5. Sewers, East Cleveland, O. ....Oct. 13
Nov. 5. School building, Marion, O. ....Oct. 20
Nov. 5. Wells and shafts, Gila County, Ariz..........Oct. 20
Nov. 7. Bridge at Curtis' Ford, Wilkesboro, N. C...Oct. 20
Nov. 7. Viaduct superstructure, Cincinnati, O. .....Oct. 13
Nov. 7. Bridge, Webster St., Oakland, Cal. ....Oct. 13
Nov. 7. Plank sidewalks, (1 year), Cincinnati, O...Oct. 13
Nov. 7. Wooden bridge (190 ft. long), Magnolia, Miss. Oct. 13
Nov. 7. Brick paving, Toledo, O...........................Oct. 13
Nov. 7. Improving electric plant, Topeka, Kan. ..Sept. 22
Nov. 8. Electric plant, etc., Wynne, Ark. ....Oct. 20
Nov. 8. Water-Works, etc., Wynne, Ark. ....Oct. 20
Nov. 8. Surveys, Olympia, Wash. ....Oct. 20
Nov. 9. Paving, etc., Cohoes, N. Y. ....Oct. 20
Nov. 9. Improving drawbridge, Camden, N. J........Oct. 20
Advertised, Engineering News, Oct. 20.
Nov. 9. School building, Fort Sill, Okla. ....Oct. 20
Nov. 9. Electric light plant, Toronto, Ont. ....Oct. 6
Advertised, Engineering News, Oct. 6.
Nov. 9. Electric energy, Toronto, Ont...................Oct. 6
Advertised, Engineering News, Oct. 6.
Nov. 9. Bridge, Sable Creek, San Jose, Cal. ....Oct. 13
Nov. 10. Water supply, Belem, Brazil ....Sept. 22
Nov. 10. Water bonds, ($30,000), New Richmond, O..Oct. 20
Nov. 10. College building, Cincinnati, O. ....Oct. 20
Nov. 10. Court house bonds, Doniphan, Mo. ....Oct. 20
Nov. 10. Fish hatchery, etc., Spearfish, S. Dak........Oct. 20
Nov. 10. Electric bonds, New Richmond, O. ....Oct. 20
Nov. 11. Bridges, (3), Olivet, S. Dak. ....Oct. 13
Nov. 12. Water bonds ($130,000), Reno, N. Mex.......Oct. 13
Nov. 12. Buildings ($106,250), Mare Island, Cal.......Oct. 20
Nov. 12. Dredging, Port Royal, S. C. ....Oct. 20
Nov. 14. Steel bridge (100 ft.), Houston, Tex. ....Oct. 20
Advertised, Eng. New, Oct. 20 to Nov. 3.
Nov. 14. Removing wreck, Rockland Harbor, Me.....Oct. 13
Nov. 15. Industrial school, Ellendale, N. Dak.........Oct. 13
Nov. 15. Water-works addition, Seattle, Wash.......Sept. 22
Advertised, Eng. News, Sept. 22 to Nov. 10.
Nov. 15. Jail work, San Saba, Tex.........................Sept. 29
Nov. 15. Electric lighting, Greensboro, N. C. ....Oct. 6
Nov. 15. Dredging bay, Coos Bay, Ore. ....Oct. 20
Advertised, Eng. News, Oct. 20 to Nov. 10.
Nov. 16. Electrical machinery, Cleveland, O..........Oct. 20
Nov. 16. Electric lighting, Camden, N. J...............Oct. 13
Advertised, Eng. News, Oct. 13 to 27.
Nov. 21. Government bldgs (8), Sophia, Bulgaria....Sept. 29
Nov. 26. Boat shelter roof, Mare Island, Cal. ....Oct. 20
Nov. 30. Dry dock, Algiers, La. ....Oct. 20
Nov. 30. Bridge, etc., and plans, Moline, Ill.........Oct. 6
Advertised, Eng. News, Oct. 6 and 13.
Dec. 1. Electric lighting, Sumter, S. C. ....Oct. 6
Dec. 1. Electric light plant, Clinton, Ill. ....Oct. 13
Dec. 2. Arc lighting, Asheville, N. C. ....Oct. 13
Dec. 7. Changing Van Buren St. bridge, Chicago, Ill. Oct. 20
Dec. 15. Storm sewers, Denver, Colo...................Oct. 13
Dec. 31. Plans for station, etc., Stockholm, Sweden. June 23
Jan. 1. City hall plans, Bridgeport, Conn...........Aug. 18
Jan. 2. Bridge, Quebec, Que. ....Sept. 29
Advertised, Eng. News, Sept. 29 and Oct. 6.
Feb. 10. Jail building, Keyser, W. Va. ....Sept. 29
No date. School building, Somerville, N. J...........Oct. 20

RAILWAYS.

ARGENTINE.—Press reports from Germany state that Herr Schiefiner, a German capitalist, has just secured from the Argentine government a concession for the construction of a complete network of railways, having a total length of 2,000 miles, which, when complete, will serve the entire southern portion of the province of Buenos Ayres as far as Bahia Blanca. A German-Belgian syndicate will be formed for the undertaking.

ASHLAND & WOOSTER.—J. L. Eberhardt, Ch. Engr., Wooster, O., informs us that surveys have been made and the right of way secured for about 40 miles of this proposed line from Ashland to Beech City, via Jeromeville, Austin, Terra Cotta, Wooster, Applecreek and West Lebanon, O., a distance of 52 miles. When final location has been made, the capital for construction will be forthcoming. No contracts of importance will be let. Pres., H. B. Camp, Akron, O.

ATLANTIC, VALDOSTA & WESTERN.—F. W. Long, Ch. Engr., Haylow, Ga., informs us that contracts are now being let for work on this proposed line between Valdosta and Jacksonville, via Haylow, Ga., and Crawford, Fla., a distance of 105 miles. All surveys have been made, the right of way obtained and capital secured. J. D. Hardin, Naylor, Ga., will do some of the work. The line is already built between Haylow and Ewing, 49 miles. G. S. Baxter & Co., of Haylow, are interested. Pres., Walton Ferguson, Jr., 18 Wall St., New York.

BAKERSFIELD & LOS ANGELES.—W. B. Storey, Jr., Ch. Engr. of San Francisco & San Jocquin Valley Ry., 321 Market St., San Francisco, Cal., informs us that this company, whose incorporation was noted in our issue of Sept. 22, has been organized in San Francisco to build a line from Bakersfield to Los Angeles, Cal., an estimated distance of 200 miles, and that this is practically all. The organization has been effected in order to enable surveys to be made and a route to be decided upon. The country to be passed over is excessively rough and the work will be necessarily heavy. It cannot be definitely stated that the road will be built until the cost of same is known. Press reports state that Mr. Storey left for Bakersfield, Oct. 6, to make a reconnoissance of the Tejon Pass and the surrounding country.

CANADIAN PACIFIC.—Reports state that most of the track has been laid on the Crow's Nest Pass extension of this railway from Lethbridge, N. W. T., to Kootenay Lake, B. C., over Crow's Nest Pass of the Rocky Mountains. Work on the proposed Columbia & Western extension, from Robson to Midway, B. C., will be in progress throughout the winter. W. F. Tye, Ch. Engr., Trail, B. C.

CANADIAN PACIFIC.—We are informed that the Ontario and Quebec division of this system is now being double-tracked between St. Anne de Bellevue, Que., and Western Junction, 6½ miles from Montreal, a distance of fourteen miles. The grading, of which there will be about 3,000 cu.yds., will be done by J. W. Munroe, Pembroke, Ont. R. W. Leonard, Ch. Engr. and Mgr. of Construction, Montreal Junction, Montreal.

CAPE FEAR & NORTHERN.—Press reports state that this railway, which is in course of construction between Apex and Holly Springs, N. C., 60 miles, will be extended south to Fayetteville, and north to Durham, connecting at the latter place with the Lynchburg & Durham line of railway. Pres., Benjamin Duke, Durham, N. C.

CHICAGO & NORTHWESTERN.—This company is reported to have let contracts for grading a new line from Denison to Algona, via Pocahontas, Ia., a distance of about 90 miles. This will provide a much shorter route than that through Sioux City.

CHIHUAHUA & PACIFIC.—Thos. J. Brennan, Secy., 80 Broadway, New York, informs us that about 10 miles of track has been laid on this proposed line from Chihuahua, Mex., via Guerrero, to the Pacific Coast, a distance of 600 kilometers (372.6 miles), and that grading has been completed on about 40 kilometers; steel bridges are now being erected. The equipment will consist of five locomotives, fifty box cars, thirty flat cars, two cabooses and nine passenger and combination coaches, most of which have already been built and delivered. The company is in the market for pumps and boilers for eight water stations and for two 60-ft. turntables. Pres., Almeric H. Paget, New York; Ch. Engr. E. S. Safford, Chihuahua.

CHINA.—Wm. Barclay Parsons, 22 William St., New York, has been engaged by the American-China Development Co. to go to China in order to locate the proposed line of railway from Hankow to Hong Kong, the contract for which was signed at Washington, D. C., by the Chinese minister and the company, on Sept. 14. Surveys are to be commenced at once.

CUBA.—It is reported that Col. Hecker, who is in charge of the transportation bureau of the war department of the United States, has been sent to Cuba to secure data and information relative to the construction of a system of railways on that island.

DALLASTOWN.—This company has been incorporated in Pennsylvania, Oct. 12, with a capital stock of $12,000, to construct a steam railway between Dallastown and a point on the York Southern R. R., one mile east of Dallastown, Pa. The incorporators are, Daniel F. Lafeau, Pres.; Henry H. Weber and George E. Neff, of York, Pa.; John C. Heckert and Charles Kohler, of Dallastown.

GEORGIA & ALABAMA.—Reports state that the Georgia & Alabama Terminal Co. has been organized, with a capital stock of $300,000, by W. W. Williamson, C. D. Baldwin, W. V. Davis and others, of Savannah, Ga., in order to construct new terminals for this railway on Hutchinson Island, near Savannah. The work will probably be done by the Georgia Construction Co., which has recently been incorporated for that purpose by W. W. Mackall, J. R. Anderson, W. W. Williamson, of Savannah, and others.

GILA VALLEY, GLOBE & NORTHERN.—A. C. Laird, Secy., Los Angeles, Cal., informs us that the Midland Construction is now at work extending this line from Geronimo to Globe, Ariz., via San Carlos, 58 miles. The entire line has been located and right of way obtained. Much of the grading has been completed and some track has been laid. Pres., William Garland, Los Angeles; Ch. Engr., Russell Chase, Geronimo, Ariz.

GREAT EASTERN.—This company was incorporated in North Carolina, October 14, with a capital stock of $650,000, to construct a railway, 130 miles in length, through Johnston, Wayne, Greene, Pitt, Beaufort and Hyde counties to a connection with the Southern Ry. at Goldsboro or Selma, N. C. J. D. McCormick and J. N. Allen, of New York; J. W. Lynch, Kinston; J. H. McCleary, Suffolk; Geo. W. Suggs and Josiah Exum, of Snow Hill, are directors.

GREENBRIER.—J. M. Gill, Huntington, W. Va., informs us that nothing further has been done towards building this line than to obtain a charter for the company. It was proposed to construct a railway from White Sulphur Springs, W. Va., to the coal and lumber district at the fork of the Greenbrier River.

KELLYTON & ROCKFORD.—This company was incorporated in Alabama, Oct. 6, with a capital stock of $50,000, to construct and operate a railway from Rockford to Kellyton, Ala., on the Central of Georgia Ry., a distance of about 15 miles. The incorporators are J. P. Batson, E. V. Jones, H. W. Pond and others, of Rockford.

LOUISIANA & ARKANSAS.—J. A. Buchanan, Gen. Mgr., Stamps, Ark., informs us that the construction of this line was completed Oct. 1, running from Stamps, Ark., to a connection with the Arkansas, Louisiana & Southern at Cotton Valley, La., a distance of 38 miles. The line is now open for traffic from Stamps to Sibley, La. Pres., Wm. Buchanan, Stamps.

MANSFIELD SHORT LINE.—We are informed that four miles of this proposed line from Lucas to Shelby, via Mansfield and Springfield, O., a distance of 19 miles, have been graded, and the contracts let for the necessary ties and steel rails. The Lucas Construction Co., of Mansfield, are the general contractors, and the Crouch Construction Co., of Chicago, the sub-contractors. Pres., C. W. French; Ch. Engr., R. E. Harwood, both of Mansfield.

MEXICO.—Press reports state that the Mexican government has granted a concession for a standard gage railway, 150 kilometers maximum length, with a liberal subsidy, to the Inguaran Copper Mining Co., in which the Paris Rothschilds are said to be interested. The railway is being planned to connect the mines with the Bay of Zituataneza, on the Pacific Coast, and will be an outlet for the copper productions.

MUNISING.—E. H. Scott, Gen. Mgr., La Porte, Ind., informs us that it is not likely that further construction will be undertaken on this line before next spring. The company already has 47 miles in operation from Munising, on Lake Superior, to Little Lake, Mich., on the Chicago & Northwestern Ry. The total projected length of the system is 110 miles. Pres., Daniel P. Eelles, Rocky River, O.; Ch. Engr., R. C. Young, Munising.

OHIO SOUTHERN.—This line is reported to have been sold, October 15, by John T. Adams, Special Master, of Waverly, O., to W. A. Read, of New York, and others, for $2,000,000, which was the upset price.

ROSSFORD & TOLEDO.—This company was incorporated in Ohio, October 12, with a capital stock of $10,000, to construct a short line of railway from the foot of the Maumee Rapids to the Cincinnati, Hamilton & Dayton Ry. The incorporators are: Edward Ford, Rathbun Fuller, William P. Tyler, Matthias R. Pepper, Thomas R. Taylor and F. H. Tanner, with headquarters at Toledo, O.

SANTA FE, PRESCOTT & PHOENIX.—W. A. Drake, Ch. Engr., Prescott, Ariz., informs us that this line has been completed to Mayer, Ariz., a distance of 25.8 miles, and that operation was to commence on October 15. Pres., F. M. Murphy, Prescott.

ST. LOUIS, OKLAHOMA & SOUTHERN.—C. N. Points, Director, Shawnee, Okla., informs us that this company has located 200 miles of this projected line from Claremore south to Willis, Ind. Ter., on the Red River, via Okmulgee, Wewoka, Sasakwa and Tishomingo. It is also expected to locate a 100-mile branch soon through Shawnee to Purcell. Pres., Gov. John F. Brown, Sasakwa, Ind. Ter.

TENNESSEE.—Press reports state that the Stevens Lumber Co. has determined to construct a new standard gage railway from Dyersburg to Tiptonville, Tenn., a distance of 28 miles. Six miles of line are now in operation as a logging road, but it is proposed to open the completed line to general service.

UTAH & PACIFIC.—Jos. A. West, Ch. Engr., Milford, Utah, informs us that the surveys have all been made, the right of way obtained and capital secured for the first 76 miles of this line, which, when completed, will be 576 miles in length. The contract for its construction, as stated heretofore, has been let to W. D. Hendricks & Sons, Richmond, Utah. Actual work on the line began October 3. Pres., A. W. McCune, Salt Lake City, Utah.

WELLINGTON & POWELLSVILLE.—J. W. Branning, Pres., Edenton, N. C., informs that this line has been completed and was opened for business on September 15. The extension just completed runs from Windsor to Ahoskie, N. C., a distance of 18 miles.

WESTERN RY. CONSTRUCTION.—This company, with offices at New York, was incorporated in West Virginia, October 8, with a capital stock of $5,000,000, with $100 paid in, to construct and operate a railway between Culiacan, State of Sinaloa, across the Sierra Madre Mountains, to Durango, Mexico. The incorporators are: John R. Newberry and R. J. Hartman, of Los Angeles, Cal.; Floyd B. Wilson, James Yalden and Bryan W. Tichenor, of New York.

WILMINGTON & NORTHERN.—Reports state that the Baltimore & Ohio R. R. Co. purchased this line, October 12, extending from Wilmington, Del., to Reading, Pa., 90 miles, and it will open up a new southern route from the anthracite coal regions in Pennsylvania.

STREET AND ELECTRIC RAILWAYS.

BANGOR, ME.—It is reported that the Bangor, Hampton & Winterport Ry. Co. is preparing plans to extend its line in the early spring to Winterport, and to complete the same by July 1. Pres., H. L. Mitchell, 29 Hammond St.

HAMPTON FALLS, N. H.—The Hampton & Amesbury St. Ry. Co. has petitioned the railroad commissioners of New Hampshire for authority to issue $40,000 of capital stock in order to construct and equip a street railway in Hampton Falls and Seabrook, a distance of four miles.

BELLOWS FALLS, VT.—F. C. Kennedy, of Burlington, Vt., informs us that all the franchises have been granted and the capital secured for the proposed Bellows Falls & Saxtons River Electric Ry., from Bellows Falls to Rockingham, via Westminster, Vt., a distance of six miles. Contracts will all be let ready for construction and some of the work done this fall and completed early next spring. Pres., J. H. Holton, Burlington; Ch. Engr., V. K. Nash, Woonsocket, R. I.

BURLINGTON, VT.—We are informed that C. W. Blakeslee & Sons, New Haven, Conn., will commence work at once on the construction of the Burlington & Hinesburgh R. R., which is to be an electric line, 16 miles in length, to be operated between Burlington and Hinesburgh. Surveys have been made and most of the right of way obtained and track supplies ordered. Pres., W. T. Babcock, Boston, Mass.; Ch. Engr., F. O. Sinclair, Burlington.

BRAINTREE, MASS.—It is reported that the selectmen of this town have granted a franchise to the Braintree & Weymouth St. Ry. Co., of Weymouth, to build on Meadow Road and French's Ave.

NEW BEDFORD, MASS.—It is reported that the New Bedford, Brockton & Middleboro St. Ry. Co. has decided upon a route for its proposed line, and will probably request a new franchise within a few days. Mayor Ashley is said to be interested.

QUINCY, MASS.—The Quincy & Boston St. Ry. Co. will soon build a carhouse, according to reports, near Neponset bridge on Robinson's wharf. The dimensions will be 93 x 23 x 144 ft., and the cost, $15,000. B. J. Weeks, Purchasing Agt. and Supt., 4 Washington St., Quincy.

WHITMAN, MASS.—Waldo Dyer, of Whitman, a director of the Brockton & Whitman St. Ry. Co., informs us that the surveys have been made, the location granted and the capital secured for this proposed electric line from Brockton to Whitman, a distance of 3½ miles. The franchise was granted on Sept. 23. Jas. F. Shaw & Co., 53 State St., Boston, Mass., have charge of the construction work. Vestibule cars will be used, and the line will serve as a connecting link in the system which is projected to run from Brockton to Rockland and Nantasket Beach, via Whitman and Abington, 30 miles. Work will begin at once. Pres., John J. Whipple, of Brockton.——We are also informed that a new organization, the Old Colony St. Ry. Co., proposes to build a 10-mile electric line in this locality early next spring, probably in April. The promoters are ready to receive proposals as to the cost of construction, etc., and may be addressed at P. O. Box 466, Whitman.

WORCESTER, MASS.—E. S. Hill, Tremont Bldg., Boston, Mass., informs us that the capital has been secured for the construction of the proposed Worcester & Webster St. Ry. from Worcester to Webster, via Auburn and Oxford, 15 miles, and that the contract has been let to the New England Electrical Ry. Construction Co., of Worcester. As stated in our last issue, the company was recently chartered, with a capital stock of $150,000. Pres., Julius Garst, of Worcester.

BRISTOL, R. I.—The Lap Joint Railway Track Co., 11 Broadway, New York, is reported to have begun work on the proposed electric line to Mount Hope. A power house and car shed will be built at Mount Hope Park, and work is to be completed before May 1.

ALBANY, N. Y.—J. S. Frost, Secy. Albany Construction Co., of Albany, contractor for the proposed Albany, Helderberg & Schoharie Electric Ry., informs us that the map and profile have been filed in Albany, and preliminary steps been taken preparatory to commencing the construction work. The route is from Albany to Schoharie, via Delmar, New Scotland, New Salem, Thompson's Lake, East Berne, Berne, West Berne and Gallupville, a distance of 42 miles. Pres., Henry W. Burgett, 82 Devonshire St., Boston, Mass.; Ch. Engr., George Yost, Albany.

BROOKLYN, N. Y.—It is announced that plans and specifications are being prepared for the changing of the motive power on the Fifth and Lexington Ave. lines of the Brooklyn Elevated R. R.; estimated cost, $750,000.

MARION, N. Y.—It is reported that L. Brown and C. L. Tassell, of Marion, are securing the right of way for a proposed electric railway between that village and Palmyra. It is said that the line will be constructed during the coming year, as a part of the capital has already been pledged; estimated cost, about $75,000.

NEW YORK, N. Y.—The board of railroad commissioners, August 28, authorized the Twenty-eighth and Twenty-ninth St. Crosstown Ry. Co., controlled by the Metropolitan St. Ry. Co., New York, to change the motive power of its line from horse to the underground electric system.

ATLANTIC CITY, N. J.—The Atlantic City St. Ry. was granted a franchise, Oct. 10, to construct and operate a double-track crosstown trolley line from South Carolina Ave. and the beach to the inlet section, via South Carolina, Arctic and Rhode Island Aves. Levi C. Albertson is interested.

SOUTH ORANGE, N. J.—The village trustees, October 17, granted a franchise to the South Orange and Maplewood Traction Co., to maintain a grade across Montrose Ave.

ALLENTOWN, PA.—The Inland Traction Co., of Allentown, was incorporated, Oct. 14, with a capital stock of $200,000, to construct a street railway in Montgomery county, 12 miles in length. The incorporators are: John H. Pascoe, Allentown; J. B. Alderfer, Pres.; Edwin S. Landis and Edwin H. Alderfer, of Souderton, Pa.; C. F. Hecklen, Quakertown, Pa.

JOHNSTOWN, PA.—The Johnstown and Somerset Traction Co. is stated to have been incorporated, October 5, by Charles S. Price, Morris L. Woolf, Pres.; David Barry, secretary; Herbert H. Weaver, and Fred Krebs, of Johnstown. It is proposed to build a trolley line from Johnstown to Geistown, Scalp Level and Windber, with several branches.

NEWTOWN, PA.—A. Chambers, of Newtown, informs us that all of the right of way has been obtained for this proposed line between Newtown and Doylestown, 14 miles. Thos. A. Connell, of Philadelphia, the contractor, began work just outside of Newtown on Oct. 10. It is reported that work will be completed by Dec. 15. Pres., Thos. P. Chambers; Ch. Engr., B. F. Knabb, both of Newtown.

BALTIMORE, MD.—David E. Evans & Co., of Baltimore, are said to have been awarded a contract, Oct. 12, for the construction of the Schroeder St. line of the Consolidated Ry. Co., to a connection, on Saratoga St., with the old Columbia & Maryland Ry.

WASHINGTON, D. C.—The stockholders of the Columbia Ry. Co. have been granted permission to issue $500,000 in bonds for the extension of the line eastward and the changing of motive power in the city from cable to underground electricity. This eastern extension is from 15th St. and Benning Road to the District line, connecting with the Chesapeake Beach Ry., with a branch line from Deanewood to Kenilworth, about seven miles in all. Its construction will involve the erection of a steel bridge 500 ft. long. It is reported that contracts for this extension will soon be let.

LYNCHBURG, VA.—The Lynchburg Electric Ry. & Light Co. has been granted a franchise by the council for constructing new lines in this city. Pres., H. P. Woodson; Directors, W. C. Ivey, R. I. Owen and others.

NEW ORLEANS, LA.—Alden McLellan, Pres. St. Charles St. R. R. Co., informs us that this company does not contemplate the building of any extensions in the near future, as currently reported.

NASHVILLE, TENN.—Reports state that the construction of an electric railway from Nashville to Lebanon and Smithville is contemplated by Pittsburg capitalists. E. E. Beard, of Lebanon, can give further information.

CINCINNATI, O.—The Cincinnati, Milford & Goshen St. Ry. Co. was incorporated, Oct. 10, with a capital stock of $10,000, to build an electric line from Linwood, in Cincinnati, to Goshen, along the Cincinnati, Columbus & Wooster Turnpike. The incorporators are: W. A. Goodwin, F. B. Niederhelman, W. C. Compton, Pres. of the Turnpike Co.; Lennox O. Goodwin and S. W. Kittering.

CLEVELAND, O.—Reports state that about 15 miles of grading have been completed on the new Cleveland & Eastern Electric Ry., and that rails for the road have been contracted for. E. G. Tillotson, Vice-Pres. Lorain & Cleveland Ry. Co., 61 Garfield Bldg., Cincinnati, is said to be interested.

CLEVELAND, O.—It is announced that the Cleveland, Berea, Elyria & Oberlin Ry. Co. is going to extend its line next summer from Oberlin to Norfolk, about 30 miles, and that the right of way is now being obtained. Pres., A. H. Pomeroy, Garfield Bldg.

LANCASTER, O.—We are informed that the Fairfield Traction Co. has been organized, with $100,000 capital stock, to build a railway between Lancaster, O., and the Boys' Industrial School, a State institution, six miles south of Lancaster. The contract for constructing the line ready for equipment has been awarded to Ingham & Neeb, of Lancaster, and work is to commence at once.

LOGANSPORT, IND.—The commissioners of Carroll county have granted a franchise for the proposed Logansport & Burlington Electric Ry. to the Business Men's Association, of this city, which will organize a company to build a line.

SUMMIT CITY, MICH.—Clark Cornwall, of Jackson, Mich.; Arthur Woodard, Ann Arbor, Mich., and Walter Joslyn, Ysilanti, Mich., have been granted a franchise by the township board of Summit to construct an electric railway to Vandercook's Lake to Summit.

EL PASO, TEX.—The citizens of this place contemplate the construction of an electric street railway in this city.

SHAWNEE, OKLA.—C. N. Points, Director of St. Louis & Oklahoma Southern Ry. Co., Shawnee, informs us that he has a franchise for a street railway in Shawnee, which it is expected to build soon. Information regarding street railway construction is solicited.

AUSTRALIA.—Press reports state that J. G. White & Co., Engineers and Contractors, 29 Broadway, New York, are beginning to ask quotations on the various requirements for the electric railway which they are soon to build in one of the principal towns in Australia.

ELECTRIC LIGHT AND POWER.

WILDER, VT.—The contract for installing the electric lighting plant for the Wilder Club & Library Building has been awarded to Austin & Letteney, Tremont Bldg., Boston, Mass.

BOSTON, MASS.—An ordinance is before the council authorizing an appropriation of $7,000 for extending the electric plant on Deer Island.

BOSTON, MASS.—Bids are asked until 12 noon, Oct. 22, for furnishing the machinery and for installing a plant at the new battery at Grover's Cliff, Winthrop, and also a plant at Nantasket Head, Hull. Each plant will consist of a boiler, one direct connected generating set, one switchboard, one storage battery, the electric blowers and starting boxes for the blowers. The plants must be completed by Dec. 31. Col. S. M. Mansfield, U. S. Engr.

PITTSFIELD, MASS.—Press reports state as follows: A scheme is on foot, backed by capitalists from New York and the west, for the consolidation of the entire electric light plants of Pittsfield, Lenox, Lee, Housatonic and Great Barrington, for the purpose of furnishing light and power to all towns and villages in Southern Berkshire. The plans of the promoters further contemplate the establishment of a railway between Pittsfield and Great Barrington—possibly a three-rail line. A number of the capitalists who have been in Pittsfield are reported as having said that $2,000,000 is available, if the necessary purchases to carry out the plans can be made. Daniel Odell and Charles N. Nelson, New York; E. A. Merrill, Minneapolis, and Thomas Greenwood, Great Barrington, are interested.

SOMERVILLE, MASS.—The council has voted in favor of establishing a municipal plant. It is probable that the question will be submitted to a vote of the citizens, Nov. 16. Alderman Lamont, Chn. Com., and Mayor Perry may be addressed.

PROVIDENCE, R. I.—The stockholders of the Narragansett Electric Lighting Co. have voted to increase the capital stock to $4,000,000, to enable the company to carry on its proposed improvements.

CROMWELL, CONN.—F. H. C. Reynolds, Pres. Cromwell Water Co., 7 Exchange Place, Boston, is reported as considering the question of building a plant in connection with the water-works.

EAST HARTFORD, CONN.—The fire district has voted to light the district with electricity. It has been recommended to make a short contract with the East Hartford Light & Power Co. The committee has also recommended that authority be secured from the legislature to build a plant to be owned by the fire district. The committee consists of E. E. King, Chn., C. F. Bingham, C. R. Forbes and A. W. Wickham.

AKRON, N. Y.—This place voted, Oct. 10, to build a municipal plant.

AUBURN, N. Y.—Press reports state that the D. M. Osborne Co. proposes to build an electric plant on the raceway to supply light and power to its three plants in the different parts of this city. The company has been asked to have the plant large enough to furnish commercial lighting.

BELFAST, N. Y.—It is stated that arrangements are being made for the proposed plant.

CANANDAIGUA, N. Y.—Thos. H. Bennett and M. D. Munger are interested in a new company which has applied for permission to build a plant. The capital stock will be about $30,000.

CHARLOTTE, N. Y.—The citizens have asked that another special election be called to allow them to reconsider their previous vote in favor of a plant and water-works, to cost $10,000 and $25,000 respectively. Bids were asked until Oct. 15 for constructing these improvements, as advertised in Engineering News, Sept. 29 and Oct. 6. Now it is proposed that so much of the sum realized on the bonds as relates to the electric lighting shall be invested and the proceeds therefrom used to pay the interest, and should any surplus be left the amount is to be added to the principal. It also authorizes the board to enter into a contract with some individual or corporation to furnish the lighting for the village instead of the village, through municipal ownership, furnishing its own lights. Engrs., Stanwix Engineering Co., Rome, N. Y.

CHATHAM, N. Y.—J. M. Klinglesmith has purchased the Spengler farm, water power, etc. It is stated that the purchaser will at once build a power plant.

HUDSON, N. Y.—Erskine Waldron, a taxpayer of this city, has commenced action in the Supreme Court looking towards annulling the lighting contract recently let to the Hudson Light & Power Co.

GREENPORT (L. I.), N. Y.—The question of the municipal ownership of the plant and water-works is being considered.

MALONE, N. Y.—F. D. Kilburn and J. F. Wright, Malone, and J. H. Abbott, of Gouverneur, N. Y., have organized a new electric light company. If the franchise already asked for is granted, work on the plant will begin at once.

MUMFORD, N. Y.—J. Ward writes us that F. H. Hyde, whose plant was destroyed in February, has purchased dynamos for the new plant, noted in our issue of last week as proposed.

NEW YORK, N. Y.—Bids are asked until Oct. 24 for furnishing gas and electric light fixtures, etc., for the department of public charities. Pres. Dept., J. W. Keller, foot East 26th St., Manhattan.

NIAGARA FALLS, N. Y.—The Union Carbide Co., of this city, has made a contract with the Niagara Falls Power Co. for 5,000-HP. in addition to that already secured.

PALMYRA, N. Y.—Olin J. Garlock, Pres. Palmyra Electric Light & Power Co., writes us that the company is building a new station, to which the old machinery will be moved. The plant will have a capacity for 32 1,200-c. p. and 1,800 16-c. p. incandescent lights; estimated cost, $35,000. Supt. and Vice-Pres., W. D. Willcox.

SHERMAN, N. Y.—T. J. Newell, Secy. Sherman Electric Light Co., writes us that the contract for furnishing the materials and for building the plant has been let to H. King & Son, Corry, Pa. The plant will have 8 to 12 arc and 350 to 700 16-c. p. incandescent lights. J. L. Thayer writes that it will be completed Dec. 1.

SIDNEY, N. Y.—Press reports state that the Sidney Camp Grove Association has decided to put in a plant and water-works for its grounds.

UTICA, N. Y.—The Utica Electric Mfg. & Supply Co. has been awarded the contract for furnishing and placing a 200 incandescent light machine in the plant of the New York Mills Co., of this city.

WATERTOWN, N. Y.—The Watertown Electric Co. has submitted a proposition to light the streets under a new contract. Pres., D. C. Middleton.

CRANFORD, N. J.—The township committee has awarded a 5-year contract for furnishing 196 lights to the Suburban Electric Light Co., at $15 a light a year.

IRVINGTON, N. J.—The question of this place having its own plant is being considered by the council. Councilman Lacombe may be addressed.

HALLSTEAD, PA.—The council has awarded a contract for electric lighting, according to reports. Work on the plant will be begun at once. The city will take six 2,000-c. p. arc and 25 32-c. p. incandescent lights. The D. L. & W. Ry. Co. will take 14 arc lights for its yards, besides other lights for the roundhouse and other property.

MARCUSHOOK, PA.—The council has passed an ordinance granting a five-year franchise for a plant to Walter G. Rust.

NEW BLOOMFIELD, PA.—The Perry Electric Light, Heat & Power Co. has submitted a proposition to light this place. The company has already begun the construction of its line from Newport to this place.

PERKASIE, PA.—The borough council has decided to submit the question at the next election of either granting a franchise for a plant or of erecting a municipal plant.

PHILADELPHIA, PA.—A meeting of the Southern Electric Light & Power Co. will be held Nov. 23 to consider the question of increasing the capital stock from $400,000 to $2,000,000. Pres., John M. Mack, Tacomy, Philadelphia.

TYRONE, PA.—A report states that the council has passed a resolution instructing the legal committee to offer the Tyrone Gas & Water Co. $90,000 for the assets, property and franchises, and if the same is not accepted, proceedings are to be instituted to take the plants under the provisions of the acts of the assembly. On July 7, 1897, this place voted to increase the debt for municipal plants.

BALTIMORE, MD.—Bids are asked until Nov. 2 for the electric lighting, heating, etc., of the executive and wardens' buildings at the state penitentiary. Arch., Jackson C. Gott, 1 East Fayette St.; Engr., Herbert G. Gear, Baltimore; Warden, John E. Weyler.—The courthouse commissioners received the following bids, Oct. 8, for furnishing the machinery and installing a plant at the new courthouse; Archs., Wyatt & Nolting, 4 East Lexington St: The McCay-Howard Engineering Co., Baltimore, 2-wire system, with Wheeler dynamo and Ball, Fisher or Ideal engine, $37,349, or with Buffalo Forge engine, $36,869; with General Electric or Walker dynamo, $37,369 or $37,849. The same company submitted separate bids for engines, generators and switchboards, ranging from $11,460 to $12,590. For wiring alone it bid $25,269 for a 2-wire system. Blake & Williams, New York, $34,840, 2-wire system, $35,104 3-wire system. J. F. Ferguson & Co., Philadelphia, $30,500 2-wire system, $31,500 3-wire plant; wiring alone, $18,000. The Southern Electric Co., Baltimore, 2-wire system, with Wheeler dynamo, $36,869; with General Electric dynamo, $37,369; for dynamos and engines alone, Crocker, $11,460; General Electric, $11,960; wiring alone, 2-wire system, $25,-869. The same company offered engines, dynamos and switchboard, using the Ideal engine and Bullock dynamo, for $13,627. T. M. Mobrey, Philadelphia, $24,000 2-wire system $25,000 for 3-wire system. The D'Olier Engineering Co., Philadelphia, engine and dynamo for 2-wire plant, $12,782; complete, 2-wire plant for $28,781. Engines and dynamos alone the bids were: Cohen & Staughton, $12,226; Walker Co., $13,098; Crook, Horner & Co., $12,295 and $12,-650; Fort Wayne Electric Corporation, $12,200; F. T. Potter, New York, $18,184; Talmadge & Wilson, Washington, D. C., $16,000 and $16,500; Thomas C. Basshor & Co., $12,-620 and $12,935. Contract was let to Ferguson & Co., Philadelphia. It was not determined which system will be used. The contract for engines and generators will not be awarded until a future meeting of the commission.

WILLIAMSPORT, MD.—The committee will submit its report for a plant and water-works in a few days. L. D. Byron and Dr. W. S. Richardson are on the committee.

FREDERICKSBURG, VA.—T. McCracken, Chn. Com., writes us that bids for furnishing the machines and for building a plant will probably be received in about 30 days. The plant will have a capacity for 72 2,000-c. p. arc lights; estimated cost, $10,000. Engr., Fort Wayne Electric Corporation, Fort Wayne, Ind.

HAMPTON, VA.—The Chesapeake Light & Power Co. proposes to extend its plant. Mgr., Segar Whiting.

GREENSBORO, N. C.—Bids are asked until Nov. 15 for lighting the streets with electricity for three or more years from Jan. 1. There will be required 70 or more 1,200-c. p. arc lights for city use. Extensive commercial lighting will be wanted. Population, 10,000. Chn. Com., B. H. Merrimon.

HAW RIVER, N. C.—The Granite Cotton Mills Co., owned by Holt Bros. & A. W. Haywood, will install a plant of about 750 lights capacity.

SUMTER, S. C.—Bids are asked until Dec. 1 for furnishing this place with 37 2,000-c. p. arc lights for a term of 10 or 15 years; also for furnishing, if necessary, 160 incandescent lights for the opera house and for commercial lighting. Cy. Clk., C. H. Hurst.

FITZGERALD, GA.—The council is reported to have voted to award the contract for building a plant and water-works to Moore & McRae, Atlanta, Ga.

FLORENCE, ALA.—Frank M. Perry, it is stated, is interested in the proposed electric light and power plant.

OPELIKA, ALA.—G. L. Webster, Cy. Clk., writes us that it is not definitely settled as yet whether the council will put in a plant or continue to have the city lighted by contract. The question will be finally decided upon in a few months.

NEW ORLEANS, LA.—The Crescent City Electric Co. has purchased land at Carrollton Ave. and the New Basin, on which it proposes to build a plant. The machinery, it is stated, will be purchased at once. The plant will have about 1,220 H. P. Gen. Mgr. and Supt., J. B. Craven.

CHICAGO JUNCTION, O.—Bids are asked until Oct. 25 for furnishing the material and for building a complete plant, as described in our advertising columns. Engr., Chas. F. Sturtevant, St. Louis, Mo.; Clk., Louis Simmermacher; Mayor, Louis C. Hess.

CLEVELAND, O.—Bids are asked until Nov. 16 for furnishing the following machinery for the addition to the plant at the Cleveland State Hospital: Div. I—Two 50-K-W.—110 W. direct connected dynamos to operate about 300 R. P. M.—Change in present switchboard and addition thereto—connecting wires from dynamo to switchboard, and one 10-HP. motor, one 7½-HP. motor, one 4-HP. motor, or (an alternative bid) one 50-K-W. dynamo, and the balance as stated above. Div. II—Two automatic high-speed engines, each to develop 75-HP. at ¼ cut off and 80 lbs. pressure at the throttle and foundations for same, or (an alternative bid), one engine of the above size. Div. III—Wiring. From the present main to the location of motor in the serving room, laundry, and machine shop, and change in the existing wiring and wiring for two arc lamps and two 50-c. p. incandescent lamps. Engrs., E. P. Roberts & Co., Osborn Bldg., Cleveland; Secy., State Hospital, H. C. Eyman.——A report states that the trustees of the Cleveland State Hospital have awarded Russell & Co., of Massillon, O., the contract for furnishing the engine and dynamos for the new electric light plant to be erected at the institution.

GIRARD, O.—The question of building a plant is being considered by the council.

LIMA, O.—The council has directed the committee to secure estimates for a new lighting contract, and also for a municipal plant. Councilman McClurg may be addressed.

NEW RICHMOND, O.—Bids are asked until Nov. 10 for the purchase of $30,000 of electric light plant and water-works bonds, according to reports. Clk., Chas. R. Day.

KOKOMO, IND.—Press reports state as follows: The electric light plant of the Citizens' Light & Power Co. was ordered sold at receiver's sale by Judge Mount Oct. 11, the sale to take place Nov. 12. The company does the lighting at $70 a light, and is capitalized at $70,000. The creditors urging the sale are the Capital National Bank, Indianapolis; American Savings Bank, Detroit, and Joseph L. Cohn, of Indianapolis. Pres., E. Snow, Indianapolis.

WORTHINGTON, IND.—C. A. Geckler, Clk., writes us that a franchise and contract for a plant and public lighting have been given to C. S. Knight, of the Fort Wayne Electric Corporation, and also for water-works. The city will use 34 lights and 41 hydrants. The town will have the option to purchase the plants within 30 days after completion.——Press reports state that the case of several citizens of Worthington as plaintiffs against the town board and C. S. Knight, contractor, to enjoin the latter from putting in a water-works and an electric light plant at this place was dismissed from court Oct. 7.

LAWTON, MICH.—This place voted Oct. 11 to issue $5,000 in bonds for electric lights.

GRAND RAPIDS, MICH.—The council has overruled the mayor's veto by awarding the contract for furnishing the machinery and for building the plant to the Chase Construction Co., 1113 Majestic Bldg., Detroit, Mich. The bids for the machinery were given under Contract Prices in our issue of Oct. 6.

JONESVILLE, MICH.—This place voted, October 10, to issue $28,000 in bonds for a plant and water-works, according to reports.

LEROY, ILL.—The Leroy Electric Light, Power & Heating Co. has purchased land for its new plant, according to reports.

ST. JOSEPH, ILL.—The bids received Oct. 6 for furnishing and erecting a plant, as advertised in our issue of Sept. 22, have been rejected. Engr., J. D. Wallace, Champaign, Ill.; Chn. Com., C. W. Gibson.

MANAWA, WIS.—We are informed that the Little Wolf River Co. is figuring on putting in a plant to be operated by steam for its own use. The company will probably buy a small dynamo and an engine. The plant will have a capacity for 100 16-c. p. lights.

MARSHFIELD, WIS.—John H. Thomas, Cy. Clk., writes us that the council rejected the bids for furnishing 28 arc lights opened Oct. 1 on account of their being too high. The city may build its own plant.

SOUTH MILWAUKEE, WIS.—The council has resolved to purchase the plant of the South Milwaukee Electric Light & Power Co. for $19,000, paying for it in monthly installments covering a period of ten years, the amount paid each month being the same that the city would pay as rent for the lights. The mayor is stated in a later reported to have vetoed the resolution.——The company has asked for a renewal of its contract. Mayor, George Bush.

RED LAKE FALLS, MINN.—We are informed that the contract for a water power plant for this place has been let to Marcus Johnson. It will have a capacity for 10 1,200-c. p. arc lights

WINNEBAGO CITY, MINN.—Bids are asked until Oct. 31 for the purchase of $8,000 of 5% bonds for the proposed plant. Pres. Village Council, Andrew C. Dunn.

WINONA, MINN.—L. D. Frost, Recdr., writes us that nothing has yet been done in regard to the building of a municipal plant. It is stated that a committee has been appointed to investigate the question and to make a report about Jan. 1.

COGGON, IA.—It is stated that the question of building a plant is being considered.

HILLSBORO, N. DAK.—Fred. L. Goodman, Mayor, writes us that the question of building a plant has been agitated, but no definite action has as yet been taken; estimated cost, $5,000.

HORTON, KAN.—The council is reported to have awarded the contract for the proposed plant to the Warrick Electric Co., Cleveland, O.

PONCA, NEB.—The question of building a plant is being considered, according to reports.

PINE BLUFF, ARK.—Walter S. Jeter is reported as interested in the proposed electric light plant and street railway; estimated cost, $150,000.

WYNNE, ARK.—Bids are asked until Nov. 8 for furnishing the machinery and for building a plant and water-works, to cost about $15,000. (Postponement from Oct. 15.) Engr., Owen Ford, Security Bldg., St. Louis, Mo.; Chn. Com., W. M. Kennedy.

TUSCARORA, NEV.—Press reports state that the Tuscarora mines are to be developed on a large scale. S. N. Milner, Mgr. of the Dexter mine, and associates, will harness the Snake River in Idaho and utilize its power. A stand-pipe will be built and the necessary dynamos will be installed. The distance from Snake River to Tuscarora in a direct line is about 115 miles, and $100,000 will be used for building the line and plant, which will deliver about 5,000 HP. at Tuscarora.

ANACORTES, WASH.—It is stated that the council has repealed the ordinance granting a franchise for a light and power plant to the Skagit Mill Co.

TACOMA, WASH.—C. B. Talbot, Civil Engr., writes us that he has projected a water power plant, to cost about $260,000. The council is considering the question of building it, it having been petitioned to do so by 800 citizens. It is proposed to secure about 12,000 HP. from the Puyallup River by way of a canal and flume, 8 × 12 ft. One-third is to be equipped for present use. The contractor is to receive annual payments of $60,000 until paid.

REDWOOD CITY, CAL.—Daniel R. Stafford, Town Clk., writes us that bids will soon be asked for an incandescent plant in connection with the water-works; estimated cost, about $3,000.

LONG BEACH, CAL.—O. F. A. Johnson, Pres. Bd. Trustees, writes us that nothing has been done yet in regard to the proposed plant. The opposition is so strong that it is probable the question will be dropped for this year.

LOS ANGELES, CAL.—The National Board of Managers has appropriated $4,500 for a plant at the Soldiers' Home in this city. Maj. W. H. Bonsall, of the board of managers, Los Angeles, may be addressed.

POMONA, CAL.—The trustees have terminated the contract with the San Antonio Light & Power Co. It is stated that the question of a municipal plant will be decided soon.

SANTA BARBARA, CAL.—Edmund M. Burke, Mayor, writes us that it will be over three months before bids will be asked for building the proposed plant. On Sept. 15 the council appointed a committee to investigate municipal ownership, but it has not yet commenced its labors. The plant will have 60 or more 2,000-c. p. arc and 1,000 16-c. p. incandescent lights, and will probably be operated by steam power. It is said that the local lighting company has been furnishing poor lights at high prices. Population, 10,000. Information is specially solicited by Mayor Burke and Chas. Weile, Chn. Com.; Cy. Engr., Frank F. Flournoy.

STOCKTON, CAL.—The Standard Electric Co. of California, the company organized by Prince A. Poniatowski and his associates for the purpose of conducting electricity from the electrical works of the Blue Lakes Water Co., in Calaveras county, to San Francisco, and for supplying intermediate towns, will apply for a franchise covering the city of Stockton, allowing the company to distribute its power throughout this city.

SALT LAKE CITY, UTAH.—The council is considering the question of making the Utah Power Co. forfeit its franchise, granted Dec. 26, 1896. It is stated that the company has done no work on its proposed plant. Pres., Francis Armstrong.

HULL, QUE.—Bids are asked until Nov. 1 for supplying and maintaining 50 1,600-c. p. arc lights. R. W. Farley, Cy. Engr., writes us that the question of building a municipal plant is at the same time under consideration.

MITCHELL, ONT.—The council is reported as considering the question of extending the city plant, at a cost of about $5,000.

PORT ARTHUR, ONT.—It is stated that this town has made an arrangement with Edward S. Jennison, Arch., 134 Van Buren St., Chicago, Ill., for the supply of 560 HP. and of 500,000,000 gallons of water a year from his power canal at Kakabeka Falls. The contract is to be submitted to the people for their approval at once. Mr. Jennison agrees to have the works completed within three years. Mr. Jennison will attempt to have manufacturing plants established here to utilize the power. Estimated cost, about $1,000,000.

NELSON, B. C.—Judge Walkem, Victoria, B. C., has submitted a decision against the council purchasing the plant of the Victoria Electric Co. for $48,000. Mayor Houston may be addressed.

CHINA.—A. L. Kuehmsted, Treas. and Gen. Mgr. the Charles E. Gregory Co., 47 South Jefferson St., Chicago, Ill., has received an order for an electric light plant for a town in North China. This plant, it is said, will be the first of the kind to be installed in that part of China. It consists of a 1,000-light dynamo, together with a complete equipment. It is considered by parties in the trade that this will be the beginning for quite a business in medium-sized plants from that part of the world.

NEW COMPANIES.—International Incandescent Light Co., Philadelphia, Pa.; $1,000,000, with $100 paid in; W. H. Hollis, W. D. Black, W. W. Lucas, G. H. Taylor.

New York Gas & Electric Light, Heat & Power Co., New York; $25,000,000; Henry J. Honmens, Frank D. Allen, F. Allen, J. F. Yawger, Louis M. King, C. N. Flint, M. W. Smith, New York. Flower & Co., New York, and Samuel A. Beardsley, Utica, N. Y., are said to be behind the company.

Pratt-Ensley Light & Power Co., Pratt City, Ala.; J. M. Landsden, Jr., Roger M. Newbold, J. M. Meigham.

The Myerstown Electric Light & Heating Co., Myerstown, Pa.; $20,000; to furnish light, heat and power; Dr. W. G. Bower, Hattie E. Bower, A. S. Rummel, Robert H. Sechler.

Erie County Electric Co., Erie, Pa.; $10,000, with $1,000 paid in; Treas., Wm. C. Readro, New York; Wm. E. Brown, New York; Wm. S. Carroll, Erie.

Kanawha Electric Co., Montgomery, W. Va., $25,000, with $50 paid in; J. W. Strangham, Dego, W. Va.; W. L. Montgomery, Jacob Segal, Montgomery.

Metropolitan Electric Co., Ottawa, Ont.; Jas. Robinson, Montreal, Que.; A. B. Broderick, T. Lindsay, Ottawa.

Pike's Peak Power Co., Colorado Springs, Colo. and Council Bluffs, Ia.; $100,000; Henry M. Blackmen, T. A. Chapman, D. W. Ross.

Black Canyon Hydraulic & Electric Power Co., Prescott, Ariz.; $5,000,000; Louis C. F. Lotz, H. S. Hildreth, Chas. V. Van Duzer.

Sherman Electric Light Co., Sherman, N. Y.; $5,000; Pres., J. L. Thayer; Secy., T. J. Newell; Treas., C. H. Corbett.

Winn Water & Power Co., Winn, Me.; Pres., Nathaniel M. Jones, Lincoln, Me.; Clk., M. F. Scott, Winn.

Hinsdale Electric Light & Power Co., Lake City, Colo.; $100,000; R. E. Peniston, D. K. Anders, Thos. L. Ashworth.

Union Incandescent Light Co., New York; $8,000; to manufacture incandescent gas lamps, mantles and globes; Leon Pistner, 230 East 50th St., New York.

BRIDGES.

ASHFIELD, MASS.—The following bids were received, Oct. 6, for constructing a bridge. A. B. Fletcher, Secy. Mass. Highway Comn., Boston:

Boston Bridge Works, Boston, Mass.	$1,425
King Bridge Co., Cleveland, O.	1,430
N. E. Structural Co., Everett, Mass.	1,432
Walsh Boiler & Iron Works, Springfield (accepted)	895
Berlin Iron Bridge Co., E. Berlin, Conn.	1,460
New Jersey Steel & Iron Co., Trenton, N. J.	1,375
Wrought Iron Bridge Co., Canton, O	1,476
Massillon Bridge Co., Massillon, O.	1,503
Pittsburg Bridge Co., Pittsburg, Pa	1,349

BOSTON, MASS.—A contract has been awarded to D. F. O'Connell, at $23,800 for constructing two masonry abutments and a central pier for the bridge over the railway track on the Columbia Road. B. W. Wells, Supt. Sts.

CAMBRIDGE, MASS.—The board of aldermen has authorized an issue of $50,000 of 3½% bridge bonds, according to reports.

MALTA, N. Y.—The city clerk informs us that it has been decided not to construct the proposed bridge at Baker's flats to have a span of 84 × 18 ft., at present.

NORWICH, N. Y.—Bids will soon be asked by the highway commissioner for designs and the construction of a new iron bridge over the Canasawacta Creek at West Main St.

CAMDEN, N. J.—Bids are asked until November 9 for the improvement of the turning of the draw of the Federal Street bridge, over Cooper's Creek, as stated in our advertising columns. Dr. J. B. Davis, Chn. Com., Bd Freeholders.

KNOXVILLE, PA.—Reports state that the Knoxville Land and Improvement Co. propose to construct a steel viaduct, 500 ft. long.

NEWTOWN, PA.—A. Chambers, Newtown, writes us that a contract has been awarded to Thos. H. Connell, Fidelity Bldg., Broad and Arch streets, Philadelphia, for constructing a plate girder bridge of one span, 65 ft. wide, on stone foundation.

WASHINGTON, D. C.—Surveys are being made for the construction of the Massachusetts Ave. and the Connecticut Ave. bridges over Rock Creek.

NEWPORT NEWS, VA.—The King Bridge Co., Cleveland, O., has been awarded a contract by the council at $43,980, for constructing viaducts at 25th and 34th Sts. and Chesapeake & Ohio R. R.

RICHMOND, VA.—An ordinance has been passed by the council to construct a bridge over the alley at the Old Dominion hospital. Benj. T. August, Clk.

WILKESBORO, N. C.—Bids are asked by the county commissioners until Nov. 7 for constructing a bridge at Curtis Ford, Yadkin River; also for a number of smaller bridges.

SPARTANBURG, S. C.—Reports state that the Southern Ry. Co. proposes to construct a new iron bridge at North Church St. C. H. Hudson, Ch. Engr., Washington, D. C.

INVERNESS, FLA.—Bids are asked by the county commissioners for a bridge at Tsala Apopka Lake, according to reports.

SELMA, ALA.—P. Y. Wood, Probate Judge, informs us that a contract has been awarded to the Indiana Bridge Co., Muncie, Ind., for an iron bridge over the Cahaba River, between Beloit and Cahaba.

CINCINNATI, O.—The board of city affairs has decided to construct a viaduct over the railroad tracks at Brighton station, from State Ave. to Barnard St.; estimated cost, $250,000, according to reports.

CHICAGO, ILL.—Bids are asked until Dec. 7 for furnishing the material and for changing the substructure and superstructure of the approach span at Van Buren St. across the by-pass along the Chicago River. James Reddick, Clk. Bd. Sanitary Trustees, 1110 Security Bldg.——The sanitary trustees have decided to ask new bids for the construction of the eight-track railroad bridge at Campbell Ave. over the drainage channel, on account of an injunction between the city and C. L. Strobel, who had formerly been awarded the contract. Bids will be received only on the Scherzer design.

KANKAKEE, ILL.—H. A. Magunder, Mayor, writes us that it is proposed to construct a stone or concrete bridge of six 100-ft. spans, 40 ft. wide, on stone foundation. The matter has just been taken up by the council, and probably the bridge will not be built before next season. W. K. Woodruff, Des. Engr., Kankakee.

PEKIN, ILL.—A contract was awarded, Oct. 8, for an iron bridge across the Mackinaw River, to the Wrought Iron Bridge Co., Canton O., according to report.

PONTIAC, ILL.—G. W. Lacey, Cy. Clk., informs us that the following bids were received Oct. 5 for a steel bridge, 150-ft. span, 18-ft. roadway and 6-ft. sidewalk on stone piers; advertised in Engineering News, Sept. 29:

Joliet Bridge & Iron Co., Joliet, Ill. (accepted)	$4,379
Indianapolis Bridge & Iron Co., Indianapolis, Ind.	4,800
B. F. Parks & Co., Cedar Rapids, Ia.	4,587
Bellefontaine Bridge & Iron Co., Bellefontaine, O.	4,587
Massillon Bridge Co., Massillon, O.	4,477
King Bridge Co., Cleveland, O.	4,492
Toledo Bridge Co., Toledo, O.	4,740
Lafayette Bridge Co., Lafayette Ind.	4,575
R. D. Wheaton Bridge Co., Chicago, Ill.	4,590
L. S. Leversedge & Co., Chicago, Ill.	4,800
I. J. Walker, Chicago, Ill.	4,900

EAU CLAIRE, WIS.—Bids are asked until Oct. 26 for constructing a bridge across the Chippewa River, between Kelsey and Bridge Sts. A description of the bids received Sept. 28, which have been rejected, was given in our issue of Oct. 13. T. P. Cochrane, Cy. Clk.

FORT DODGE, IA.—The Mason City & Fort Dodge R. R. Co. has awarded a contract to Geo. Keppner, at $3,000, for constructing two bridges.

MINNEAPOLIS, MINN.—The question of issuing $80,000 in bonds for the construction of a bridge over the Mississippi River, connecting 32d Ave. and 25th Ave., will be submitted to a vote at the election, Nov. 1.

ST. PAUL, MINN.—The board of aldermen has awarded a contract to Wm. A. Lee, at $8,000, for reconstructing the Forest St. bridge.

TOPEKA, KAN.—The county commissioners are considering a proposition to construct a steel bridge 800 ft. long over the Kansas River, near Valencia, to cost about $14,000. Address Commissioner Williams.

WELLINGTON, KAN.—The county commissioners are considering the question of constructing a new bridge over the Minnescha River, near Belle Plaine, according to reports.

WICHITA, KAN.—Estimates have been submitted to the council by H. H. Hendershot, Asst. Cy. Engr., for a proposed viaduct on Douglas Ave., from Fourth to Washington Ave. Length, 1,500 ft.; width, 34 ft.; 25,000 cu. yds.

of dirt; 8,000 cu. yds. of masonry; if steel is used it will take 550 tons; estimated cost, $95,000; stone, estimated cost, $60,000.

KANSAS CITY, MO.—Bids are asked until 10.30 a. m., Oct. 20, for grading the approaches to the bridge over Blue River. Thos. F. Callahan, County Surveyor.

ST. CHARLES, MO.—The St. Charles Co. is considering the question of constructing a bridge over the Missouri River. Theo. Bruere, Pres., informs us that no specifications have yet been prepared.

UNIONVILLE, MO.—Bids are asked until Oct. 26 for constructing a number of steel and combination bridges, according to reports. Chas. C. Bailey, Bridge Comr.

POCAHONTAS, ARK.—J. M. Rose, Pres., Pocahontas Bridge Co., informs us that plans have been prepared by M. S. Hasie, Fort Worth, Tex., for a steel railway and highway bridge, 210 and 97-ft. spans, 18 ft. wide, on steel cylinder piers; estimated cost, $35,000.

HOUSTON, TEX.—Bids are asked until Nov. 14 for constructing a 100-ft. steel bridge over Buffalo Bayou, as stated in our advertising columns. Cy. Engr., I. Austin Miller; Mayor, S. H. Brashear.

LOS ANGELES, CAL.—Press reports state that the Southern Pacific R. R. Co. will shortly have in process of construction in different parts of California, 12 steel railway bridges, to cost about $300,000. The company purposes by degrees to substitute steel bridges for crossings of other styles throughout its entire system.

CHATHAM, ONT.—Owen McKay, Ch. Engr., Lake Erie & Detroit River Ry., Walkerville, Ont., writes us that B. Douglas, Bridge Engr., Michigan Central Ry., Detroit, Mich., is now preparing plans for a new steel bridge over the River Thames, for the Erie & Huron Ry. The structure will be 270 ft. long, and consist of two girder spans, 75 inches in length, and a draw span of 120 ft. The plans will be submitted to Owen McKay, Ch. Engr.

TORONTO, ONT.—Chas. H. Rust, Cy. Engr., writes us that no definite action has yet been taken by the council in regard to the proposed bridge across the River Don, on Queen St.; span, 125 × 66 ft.; bow string design, capacity 150 lbs. per sq. ft., on stone and concrete foundation.

BUILDINGS.

FAIR HAVEN, VT.—A fire in this city destroyed Knight's Block, a 3-story building used as an opera house, with stores beneath, causing an estimated loss of $40,000; insurance, $30,000.

ST. ALBANS, VT.—We are informed that Huey Bros., 4 Oliver St., Boston, Mass., received the contract for heating the U. S. Building in this city, at $4,000; time, 65 days. John F. Dalton, of Savannah, Ga., was the lowest bidder at $3,738; time, 90 days.

NEW HAVEN, CONN.—The following bids were received by Lt.-Col. D. P. Heap, U. S. Engrs., Tompkinsville (S. I.) N. Y., October 15, for erecting the New Haven Harbor breakwater light station, as advertised in "Engineering News":

Toomey Bros. & Co., Guilford, Conn.	$24,000
Clinton Stephane & Son, 44 Broadway, New York	29,225
Houston Const'n Co., Girard Bldg., Philadelphia	31,822
Ambrose F. Dudley, 100 Broadway, New York	32,450
B. & B. S. Belden, Hartford, Conn.	33,600

BATAVIA, N. Y.—W. D. Smith was the lowest bidder for installing a steam heating apparatus in Ellicott Hall, for the town trustees, at $1,134. Arch., Geo. F. Metzger, Buffalo, N. Y.

BATH, N. Y.—Bids are asked until October 22 for plumbing, steam heating, electric lighting and refrigerating plants at the New York State Soldiers' Home, at Bath. Secy., O. H. Smith.

BINGHAMTON, N. Y.—Bids are asked until Oct. 24 for erecting additions, alterations and repairs, plumbing and electric wiring and fixtures of the North building of the Binghamton State Hospital. Pres., John B. Stanbrough, Binghamton; Arch., I. G. Perry, Albany, N. Y.

BROOKLYN, N. Y.—It is reported that Ernest Raymond, 38th St. and Fort Hamilton Ave., will erect thirty-two 2-story frame dwellings, at 40th St. and 12th Ave; total cost, $103,600.

BUFFALO, N. Y.—The board of park commissioners has directed that bids be asked for a steam heating plant to be installed at the Park Zoological Gardens.——The board of public works has accepted plans for the new 3-story building for School No. 19, to cost $70,000. Arch., Robt. A. Wallace.——The Pan-American Exposition Co. now proposes to hold the fair in 1901, according to reports. Secy., Richmond C. Hill; Arch., Esenwein & Johnson, 707 Mooney Bldg.

CENTRAL ISLIP (L. I.), N. Y.—Bids are asked until Oct. 27 for erecting and finishing a building for the present heating and lighting plant at Central Islip. Henry E. Howland, Pres. Bd. of Mgrs., 1 Madison Ave., New York.

JAMESTOWN, N. Y.—Reports state that a brick building has been presented to the Y. M. C. A., which will remodel it at a cost of about $20,000.

NEW YORK, N. Y.—Bids are asked by the board of education, at 585 Broadway, until October 24, for supplying furniture for Public School 2 and additions; for furniture for Public School 137; also for improving sanitary condition of lots in the rear of Public School 34, Borough of Manhattan.—Reports state that De Lemos & Cordes, 130 Fulton St., are preparing plans for two additional stories, 186x300 ft., on the rear of the present building, at 6th Ave. and 18th and 19th Sts., to cost about $200,000.——Plans have been filed by P. J. Quirk, 2,088 7th Ave., for two 6-story brick and stone flat buildings, on 124th St., near Lexington Ave., to cost $115,000. Arch., Henry Anderson, 1,180 Broadway; by William Call, 1,133 Broadway, for a 6-story brick flat building on Central Park West, near 94th St., to cost $100,000; by Abraham Perelman, 161 Orchard St., for four 6-story brick flat and store buildings, at 133 and 135 Goerck St., to cost $100,000. Archs., Horenburger & Straub, 122 Bowery; by Louis F. Dommerich, 314 West 75th St., for an 8-story brick warehouse, at 64 to 68 Wooster St., to cost $90,000. Arch., E. H. Kendall, 150 5th Ave.; by Paul B. Pugh, 674 Columbus Ave., for a 10-story brick flat building, on 15th St., east of Union Square, to cost $150,000. Arch., G. A. Schellenger, 128 Broadway; by Terence Farley's Sons, 253 Columbus Ave., for seven 6-story brick and stone dwelling houses, at 90th St. and West End Ave., to cost $119,000. Arch., Clarence True, 459 Boulevard.

SONYEA, N. Y.—It is reported that the state board of charity, October 13, approved plans for fifteen dormitory buildings and other structures for the Craig Colony for Epileptics, at Sonyea, to cost about $115,000; and also plans for improvements to the Orange and Niagara county almshouses and the Thomas Asylum for Indian Children.

UTICA, N. Y.—J. Phil Bannigan, Clk. of School Bd., informs us that all contracts have been awarded for erecting the new academy building which, when completed, is estimated to cost $155,000. John Ulrich, of Utica, has the carpentry contract; McDermott & Scott, of Utica, have the masonry contract; Peck-Williamson Heating & Ventilating Co., Cincinnati, O., has the heating contract. Arch., Jacob Agne, Jr., 32 Arcade Bldg., Utica.

TROY, N. Y.—M. Kennedy has been awarded the contract for plumbing for the new high school building, at $5,124.

WARD'S ISLAND, N. Y.—Bids are asked until Oct. 27 for erecting steam heating, plumbing and drainage apparatuses and electric wiring and fixtures for a cold storage building at Ward's Island, New York, N. Y., for the Manhattan State Hospital. Henry E. Howland, Pres. Bd. of Mgrs., 1 Madison Ave., New York.

PLAINFIELD, N. J.—The 3-story brick building on North Ave., occupied by the Bard Cycle Co. and others, was destroyed by fire, October 16, causing an estimated loss of $60,000.

SOMERVILLE, N. J.—We are informed that bids are being received for the erection of a 2-story fireproof building, 43 × 160 ft., to be used as a children's home; estimated cost, $25,000. Arch., Wm. E. Bloodgood, 64 Cedar St., New York.

BALTIMORE, MD.—Bids are asked by the directors of the Maryland Penitentiary until Nov. 2 for the electric lighting and power and heating plants, refectory, etc., for the executive and warden's buildings. Warden, John F. Weyler; Arch., Jackson E. Gott, 1 East Lafayette Place, Baltimore.

GASTONIA, N. C.—Plans have been completed for a new city hall building, which will contain steel cages in the basement for jail purposes. Arch., C. C. Hook, Charlotte, N. C.

SAVANNAH, GA.—The following bids were received by the supervising architect, Washington, D. C., Oct. 13, for furnishing an electric passenger elevator for the U. S. public building at Savannah:

		Time.
Morse, Williams & Co., Philadelphia	$3,817	2 mos.
Sprague Electric Co., New York	3,735	90 days.
Crane Elevator Co., Chicago, Ill.	3,900	60 days.
Standard Elevator & Mfg. Co., Chicago	3,600	90 days.
Otis Bros. & Co., New York...$4,100 and	3,400	6 w'ks.
Eaton & Prince Co., Chicago	3,900	3 mos.

WINCHESTER, TENN.—The Pauly Jail Co., St. Louis, Mo., is stated to have been awarded the contract for erecting a new jail building at this place, including electric light plant, etc., at $9,700.

LOUISVILLE, KY.—The county commissioners have granted a contract to M. Bush & Co. for the erection of an addition to the jail, at $2,750.

CINCINNATI, O.—Bids are asked by the directors of the University of Cincinnati until Nov. 10 for the excavation and masonry, brick work, cut stone work, plastering, cement work, roofing, painting and glazing, iron work, carpenter work, plumbing and gas fitting, marble work, tile work and electric light wiring required for the south wing, known as Cunningham Hall, of the new University building; reported cost, $60,000. Chn., J. G. Schmidlapp; Archs., S. Hannaford & Sons.

MARIETTA, O.—The proposition of constructing a new court house for Washington county, to cost about $125,000, is to be submitted to the voters at the elections on Nov. 8.

MARION O.—Bids are asked until Nov. 5 for a small brick school building for Marion township. J. M. Monnett Pres. Bd. of Education; Sloan & Ault, Archs., Marion.

DETROIT, MICH.—Plans have been prepared, according to reports, for a 4-story brick and stone flat building to be erected for C. H. Colwell, on Canfield Ave., near Woodward Ave. Arch., Norval Wardrop, 61 West Fort St.

CHICAGO, ILL.—Reports state that a 3-story brick and stone store and flat building, 100 × 150 ft., will be erected for John Shelley at Woodlawn Ave. and 63d St., to cost $50,000. Arch., Harold Flower, Monroe Ave. and 63d St.——Julien Blaine has been granted a permit to erect a 4-story apartment building at 157 and 159 East 47th St., to cost $38,000. Arch., A. Foster, 4310 Cottage Grove Ave.——The Ladies' Auxiliary of the Lying-in Hospital contemplates the erection of a new hospital building, to cost $60,000.——A new 4-story brick and stone hospital building will be built on Frankfort St., near Robey St., for the St. Anthony's Hospital and Orphanage, at Hoyne Ave. and Homer St. Dr. Paul Pollach is interested.

CHICAGO, ILL.—Bids are asked until Nov. 3 for constructing an extension to the temporary postoffice building, as stated in our advertising columns. Supervising Arch., Jas. Knox Taylor, Washington, D. C.

LAHARPE, ILL.—Bids are asked until Oct. 26, extension of time, for erecting a new 2-story school building 77 × 75 ft., to cost about $14,000. Archs., Payne & Son, Carthage, Ill.

MINNEAPOLIS, MINN.—The board of education has requested that a proposition to issue $200,000 in bonds for the erection of new school buildings be submitted to the people at the November elections.——J. & W. A. Elliott have been awarded the contract for the masonry work on the east wing of the new city hospital building, at $14,500; and the Wisconsin Bridge & Iron Co., for erecting the structural iron, at $5,000.

WHEATON, MINN.—Plans and specifications are being asked by Independent School District No. 32 for a new school building, to cost from $12,000 to $14,000. Clk., T. K. Mork.

SPEARFISH, S. DAK.—Bids are asked by the U. S. fish commission, Washington, D. C., until Nov. 10, for the construction of a fish hatchery workshop and icehouse at Spearfish. Comr., George M. Bowers.

BUTTE, MONT.—Dolan & Hamill are reported to have received the general contract for the new Lincoln school building, at $36,803.

DONIPHAN, MO.—Bids are asked by Ripley county, until Nov. 10, for the purchase of $20,000 of 4% courthouse and jail bonds. W. C. S. Lackey, County Treas.

ST. LOUIS, MO.—The Hill-O'Meara Construction Co. has been awarded the contract for erecting a new 10-story steel and brick building at 6th and Olive Sts., to cost about $250,000. Work is to be completed by May 1. The proposition to build a new $1,000,000 public library building in St. Louis will be submitted to the voters next April.

FORT SILL, OKLA.—Bids are asked by the department of the interior, Washington, D. C., until Nov. 9, for the construction of a brick school building at the Fort Sill Boarding School, Kiowa Agency. W. T. Walker, Indian Agt., Kiowa Agency, Anadarko, Okla.

VICTOR, COLO.—Wm. J. Prift & Co. have been awarded the contract for the completion of the Union Grand Opera House.

TACOMA, WASH.—A fire in this city, Oct. 11, damaged the unfinished Olympia Hotel, built by the Tacoma Land Co. in 1892, at a cost of about $400,000; estimated loss, $200,000. Archs., G. W. & W. G. Hewitt, Bullit Bldg., Philadelphia, Pa.

MARE ISLAND, CAL.—Bids are asked until Nov. 12 for the erection of twelve officers' quarters at the U. S. Navy Yard, Mare Island; appropriation, $106,250; also until Nov. 26 for the construction of shelter roof for boats, appropriation, $14,300. Address Mordecai T. Endicott, Ch. of Bureau of Yards and Docks, Washington, D. C.——The following bids were received Oct. 12 for erecting a hospital building at the Mare Island Navy Yard, San Francisco:

Dennis Jordan, San Francisco	$82,000
J. H. McKay, San Francisco	75,820
F. A. Williams, San Francisco	84,684
R. H. Bassett, Fruitvale, Cal	90,895
W. L. Prather, Jr., Oakland, Cal	75,987
James B. McKenzie, San Francisco	81,400
Andrew Dahlberg, San Francisco	72,441
C. A. Fletcher, San Francisco	83,935
John J. Flanagan, San Francisco	71,000
J. Phillips, San Francisco	76,500
Hannah Bros., San Francisco	94,867
C. C. Blair, Vallejo, Cal	79,650
Hawkins & Lindsay, San Francisco	78,391
Henry Jacks, San Francisco	84,150
Phil Sheridan, Berkeley, Cal.	91,775
W. W. Anderson & Robert Greig, San Francisco	97,000
Linnott & McCann, San Francisco	79,890
C. M. Depew & E. L. Brookes, San Francisco	78,815
Andrew Wilkie, San Francisco	83,607
Matthew McGowan, San Francisco	74,000

SAN FRANCISCO, CAL.—Contracts have been let, according to reports, for a 2-story building to be erected on Sutter St., between Scott and Devisadero Sts., for the Mount Zion Hospital. Arch., M. J. Lyon, 120 Sutter St.

BOISE, IDAHO.—Bids are asked by the supervising architect, Washington, D. C., until Oct. 27, for the excavation, foundations and exterior stone walls of basement for the U. S. public building in Boise.

KINGSTON, ONT.—Bids are asked by the department of public works, Ottawa, Ont., until Oct. 28, for the erection of a drill hall at Kingston. Secy., E. F. E. Roy; Arch., Arthur Ellis, Kingston.

TORONTO, ONT.—It is reported that plans have been prepared for a 7-story brick and stone hotel building, 207 × 197 ft., to be erected by Aemilius Jarvis and others on King St., at a cost of about $1,750,000. Archs., Harding & Gooch, 252 Broadway, New York.

SALTILLO, MEX.—A new bank and post office building will be erected for the Coahuila Bank of Saltillo, according to reports, to cost about $75,000. Archs., O. H. P. Rudesill & Son, Monterey, Mex.

WATER-WORKS.

BRIDGETON, ME.—It is stated that the council is again planning for a new water supply.

CAMBRIDGE, MASS.—Mayor Sortwell has vetoed the ordinance appropriating $8,000 for the construction of the Hobbs Brook reservoir.

AMSTERDAM, N. Y.—Bids are asked until 7:30 p. m., Oct. 22, for hauling, etc., about 5,900 ft. of 36 to 10-in. cast-iron and vitrified pipe. Pres. Comrs., John Kellogg.

BUFFALO, N. Y.—The commissioners of public works have rejected the bids opened Sept. 29 for laying a 20-in. pipe across Buffalo River to afford protection from fire to those on the island. The bid of Hingston & Woods, which was lowest, was $1,675 in excess of the appropriation of $10,000 made by the council. It is believed that the property owners will make a protest in order to secure the work being done this winter if possible.

CHARLOTTE, N. Y.—We are informed that the citizens of this place have asked that another election be held for them to reconsider their vote of last spring on the question of issuing $25,000 in bonds for works, and $10,000 for an electric plant. Bids were asked, until October 15, for furnishing the machinery and for building the plants, as advertised in Engineering News. The plans were prepared by the Stanwix Engineering Co., Rome, N. Y.

GREENPORT (L. I), N. Y.—The village trustees are considering the question of the municipal ownership of the works of the Greenport City Water Co.

JAMAICA (L. I.), N. Y.—The Jamaica Water Supply Co. has issued $400,000 of 5% bonds, $250,000 of which is to be used in retiring outstanding bonds and the remainder is to be used in the building of the proposed extension of the mains to Queens and Hollis, and the installing of new hydrants in that territory. The capital stock of the company is $300,000, divided into 3,000 shares of $100 each. The majority of the stock is held by Boody, McLellan & Co., David A Boody, ex-Mayor of Brooklyn, and the estate of John and John C. Lockwood.

SIDNEY, N. Y.—It is stated that the Sidney Camp Grove Association has decided to build works and a light plant for its grounds.

WEST TROY, N. Y.—The Watervliet water board, it is reported, is considering the question of asking the taxpayers to grant it authority to purchase the works of the West Troy Water Co.

EAST NEWARK, N. J.—Edward Kenney, Mayor, has applied to the street and water board to extend the water mains to this borough, the borough to pay the cost of the mains, etc.

FRENCHTOWN, N. J.—The question of securing a water supply is being considered.

GLOUCESTER, N. J.—The following bids were received Sept. 15, but not opened until Oct. 11, for furnishing a 2,500,000-gallon pumping engine: Robert Wetherill, $10,825; Loretz & Sons, $10,450; Givin, Longacre & Lamborne, $13,217 and $12,587; Barr Pumping Engine Co., $10,000.

JERSEY CITY, N. J.—The National Meter Co., New York, has been awarded the contract for furnishing three meters for the Belleville works, at $8,474.

ORANGE, N. J.—We are informed that nothing definite has yet been done in regard to an increased water supply. Several plans have been suggested, as noted in our issue of last week. Pres. Council, Geo. Letrhidge; Chn. Com., Alderman Cuddy.

SPRING LAKE, N. J.—Bids are asked, until Nov. 1, for furnishing and laying about 20,000 ft. of water-pipe, as stated in our advertising columns. Engrs., Lehlbach Bros., Newark, N. J.; Mayor, E. V. Patterson.

CARBONDALE, PA.—The Crystal Lake Water Co., it is stated, has decided to build a new dam next summer. The dam will be 54 ft. high and 42 ft. thick at the bottom.

ERIE, PA.—The select council has voted against an ordinance introduced by Councilman Emling creating a board of water and light commissioners.

LANCASTER, PA.—Local papers state that Allen Hazen, St. Paul Bldg., New York, and Dr. M. L. Davis will complete a report, plans, etc., for a 10,000,000-gallon filtration plant. Supt., E. H. Frailey.

MEADVILLE, PA.—On account of errors in the legislation for the purchase of the works of the Meadville Water Co. another election will be held Nov. 8 to vote on the question of appropriating $153,000 for the purchase.

MILLERSBURG, PA.—The Swartara Water Co. has been incorporated, with a capital stock of $500, of which $50 is paid in; Treas., E. H. Leffler, Millersburg; incorporators, N. C. Freck, R. E. Woodside and H. L. Lark, Millersburg.

PHILADELPHIA, PA.—An application is pending for a charter for a corporation to be known as the Philadelphia Water Co., the object of which, is is stated, is to supply the city with pure water. The incorporators named in the application for a charter are: J. W. Marshall, William J. Moore, John D. Hughes, Thomas A. Berry and John S. Thackeray, of Chestnut St., and their solicitor is H. W. Clark.

MILTON, DEL.—Alderman S. B. Chandler writes us that this town has no works, except a pump. There is a good water supply at the head of navigation at the mill pond. It is probable that in the near future works, an electric light plant, etc., will be built. Population, 1,400.

WILMINGTON, DEL.—The water commissioners have been asked to extend the water mains to Edgemoor.

BALTIMORE, MD.—Bids are asked until Oct. 26 for furnishing about 150 tons of Omaha pig lead. Ch. Engr., Water Bd., Wm. L. Kenly.——The Tuxedo Park Protective Association has granted a 25-year franchise to the Tuxedo & Embla Parks Water & Light Co.

HARPER'S FERRY, W. VA.—Mrs. H. R. Miles, Pres. Village Improvement Society, 1610 Q St., N. W., Washington, D. C., writes us that an engineer (probably W. A. McFarland, Washington) had been engaged by the society to submit estimates for works, to cost about $35,000. The water supply could be secured from the Potomac River on the north or the Shenandoah River on the south side of the town. The matter of issuing bonds will be agitated. It will probably be some time before the question is submitted to a vote of the people.

HINTON, W. VA.—The Hinton Water-Works Co. wants estimates for a 1,000,000-gallon filter, according to reports.

LOGAN, W. VA.—Chas. Bennett and Mr. Campbell are interested in the proposed works for this place.

CAMDEN, S. C.—The council is reported as again having taken up the question of building works, and that contracts will be let this winter.

CHARLESTON, S. C.—The ways and means committee has submitted another plan for obtaining an increased water supply for municipal works.

ORANGEBURG, S. C.—F. Demas, Clk., writes us that the city will issue $40,000 of 5% bonds for the proposed works and electric plant. No definite plans have been decided upon. The water supply will be secured from artesian wells. Population, 5,000. Up to Oct. 12 no engineer had been engaged. T. M. Rayser and T. C. Doyle are on the committee.

ATLANTA, GA.—This city voted Oct. 5 against issuing $200,000 in bonds for extending the water mains. Mayor, Chas. A. Collier.

FITZGERALD, GA.—The contract for building works and a light plant has been let to Moore & McRae, Atlanta, Ga.

GREENSBORO, GA.—Capt. A. W. Walton and L. J. Wagner, Rome, Ga., are reported to have been awarded the contract for building the works, noted in our issue of Sept. 22. Mayor, J. B. Williams.

CRYSTAL SPRINGS, MISS.—Bids are reported as wanted for the purchase of $16,000 of bonds for constructing the proposed works and electric plant. Engr., W. G. Kirkpatrick, Jackson, Miss. Chn. Com., W. C. Wilkinson.

TULLAHOMA, TENN.—The question of building works is again being considered. Mayor, H. Henley.

RUSSELLVILLE, KY.—B. B. Andrews, Mayor, writes us that the city has contemplated building water-works, but on account of a bonded indebtedness, no action will be taken at present. Mayor Andrews is very desirous of having works in this place. Population, 3,500.

STURGIS, KY.—The council is reported as planning to build the proposed works.

ALLIANCE, O.—At the election Nov. 8 this city will vote on the question of purchasing the works of the Alliance Water-Works Co. Councilman Conger, Chn. Com.

COLUMBUS, O.—The board of public works has rejected the bids received, October 3, for constructing the new water-works dam, on account of their being too high. Local papers state that city will do the work itself. The itemized bids are given in another column.

MARIETTA, O.—Bids are asked until Oct. 31 for furnishing and installing a 3,000,000-gallon pumping engine. Supt., J. B. West; Pres. Trustees, J. H. McConnell.

NEW RICHMOND, O.—Bids are asked until Nov. 10 for the purchase of $30,000 of bonds for the proposed works and electric plant. A filtration plant will be put in. The water supply will be secured from the Ohio River. Engr., E. F. Layman, 32 East 3d St., Cincinnati; Cy. Clk., C. R. Day.

URBANA, O.—The council has appropriated $300 for plans for the proposed municipal works. Population (1890), 7,000. Councilmen Hitt and Brennan may be addressed. Bids for building the works will probably be asked soon.

WELLSVILLE, O.—The council has decided not to submit the question of issuing bonds for extending the water mains at the election Nov 8, according to reports.

CICERO, IND.—The Home Gas & Water Co. has been incorporated, with a capital stock of $15,000, by Wm. Winkel and Wm. H. Roney.

FORT WAYNE, IND.—Bids are asked until Oct. 20 for furnishing and installing a 6,000,000-gallon high duty pumping engine, according to reports. Chn. Trustees, Wm. Tagtmeyer.

NEW ALBANY, IND.—The Home Crystal Water Co. has awarded the contract for two 150-HP. boilers to M. Zier & Co., at $6,600. Other contracts are soon to be let. Engr., Frank Shefold.

WORTHINGTON, IND.—C. A. Geckler, Clk., writes us that a franchise for works and a light plant has been granted to C. S. Knight, of the Fort Wayne Electric Corporation, Fort Wayne, Ind. The city will use 41 hydrants and 34 lights, to be put in at a cost of $39,000. The city has the option of purchasing the plants within 30 days after completion.

BAY CITY, MICH.—The water board is making estimates for extensions to the water mains for next year. The board laid two miles of mains this year.

GRAND RAPIDS, MICH.—The committee has been authorized to engage a mechanical engineer to recommend the best method for increasing the capacity of the pumping station.

JONESVILLE, MICH.—This place voted Oct. 10 to issue $28,000 in bonds for works and an electric plant.

DETROIT, MICH.—It is proposed to put in a new system of intake pipes, at a cost of from $40,000 to $120,000. Supt., Marshall H. Godfrey; Engr., C. W. Hubbell.

ALTON, ILL.—The committee has recommended that the council negotiate for the purchase of the works of the New England Water-Works Co. and that the question be submitted to a vote of the citizens.

CHICAGO, ILL.—Bids are asked, until October 28, for laying water-mains in a number of streets. L. E. McGann, Comr. Bd. Local Improvements.

MILLEDGEVILLE, ILL.—The council has rejected the bids received Oct. 7 for furnishing about 10,500 ft. of 4, 6 and 8-in. cast-iron water pipe, etc., according to reports. Pres., J. F. Greenawalt.

WHITEHALL, ILL.—This place voted, Oct. 10, to issue $8,500 in bonds for the proposed works.

PERSIA, IA.—Reports state that this place has voted to issue $5,000 in bonds for works. Recdr., L. D. Tupper.

BERESFORD, S. DAK.—The following bids have been received by Aug. Frieberg, Mayor, for furnishing the tank for the proposed works, to cost about $12,000: Jackson & Moss, Des Moines, Ia., $6,485 and $6,823; W. W. Allen & Co., Hawarden, Ia., $5,928 and $6,428.

DEADWOOD, S. DAK.—Bids are asked until Oct. 24 for furnishing 4,000 ft. of 4 and 10-in. cast-iron water pipe, special castings, etc. Bids were opened Oct. 17 for building a 200,000-gallon tank, excavating, etc., for the works. Chn. Com., D. A. McPherson.

BOZEMAN, MONT.—This city has voted for the third time in favor of issuing $165,000 of 5% 20-year bonds for the purchase of the works of the Bozeman Water-Works Co. The mains will probably be extended about a mile. Cy. Clk., Geo. D. Pease.

TOPEKA, KAN.—It has been decided to hold the election Nov. 12 to vote on the question of purchasing the works or building a new plant instead of Nov. 5. Mayor Fellows may be addressed.

CARTHAGE, MO.—The Carthage Water Co. has been incorporated, with a capital stock of $125,000, by H. H. Harding, E. B. Jacobs and Howard Gray.

INDEPENDENCE, MO.—An election will be held Nov. 1 to vote on the question of issuing $75,000 in bonds for extending the works and the sewerage system.

WYNNE, ARK.—Bids are asked until Nov. 8 for furnishing the materials and for building the proposed works and electric light plant, to cost about $15,000. (Postponement from Oct. 15.) Engr., Owen Ford, 710 Security Bldg., St. Louis, Mo.; Chn. Com., Wm. M. Kennedy.

WACO, TEX.—Press reports state that the Bell Water Co. will probably rebuild at once the stand-pipe which is said to have burst Oct. 6. There were two iron stand-pipes, one of 188,000 gallons, 20 × 80 ft., and the other of 206,000, 20 × 88 ft. Pres., J. D. Bell.

CRIPPLE CREEK, COLO.—Two plans are being considered for a better water supply. One plan proposed is to turn the waters of Oil Creek through the saddle between Carbonate and Tenderfoot hills and thence into Cripple Creek. If this can be accomplished the city can get a supply of 400,000 gallons a day. Another plan is to buy the works of the Michigan Pipe Co., Bay City, Mich., the owner of the works on Beaver Creek. The reservoir has a storage capacity of 78,000,000 and a daily flow of 1,600,000 gallons. J. Stanley Jones may be addressed.

FLORENCE, COLO.—P. T. McGuire, Mayor, writes us that the proposed works will furnish water by gravity, the water supply being secured from the mountains. There will be required 10½ miles of supply main, four miles of laterals, 40 hydrants, a stand-pipe, 30 × 50 ft., etc.; estimated cost, $135,000. Bids will probably be wanted in about 25 days. Engr., Hiram Phillips, Oriel Bldg., St. Louis.

GREELEY, COLO.—The council is reported as considering plans for increasing the water supply. Population (1890), 2,400.

LAKE CITY, COLO.—This place is reported to have voted to change its water supply from Lake Fork Branch to Wade's Gulch, so that the former stream may be used by the mills.

PALMER LAKE, COLO.—The question of a better water supply is being considered, according to reports. P. O., Palmer.

BREMERTON, WASH.—Bids are asked until Oct. 22 for extending the mains at the Puget Sound naval station, Bremerton. Appropriation, $4,007. M. T. Endicott, Ch. Bureau Yards and Docks, U. S. Navy, Washington, D. C.

SEATTLE, WASH.—Bids are asked until Nov. 15 for constructing certain additions to the water-works, as described in our advertising columns. The plans and specifications may be seen at the office of the Engineering News Publishing Co., Monadnock Block, Chicago, and 220 Broadway, New York. Secy. Bd. Pub. Wks., Frank Oleson.

HEMET, CAL.—W. B. Rider, Redlands, Cal., is reported as making surveys for the proposed filtration plant for the Lake Hemet Water Co.

OAKLAND, CAL.—The Investors & Promoters Co. has secured permission to build works for the Alvarado district. Orestes Pierce and Wm. Pierce Johnson are interested.

PASADENA, CAL.—Bids are asked until Oct. 25 for deepening the city well, etc. Cy. Clk., Herman Dyer.——It is stated that J. B. Lippincott has been engaged to prepare plans and estimates of cost for works. Bonds will be issued for the purposes.

PORTERSVILLE, CAL.—The Portersville Water Development & Improvement Co. has been incorporated, with a capital stock of $10,600, all of which has been subscribed. It is said that all contracts have been let. G. T. Frost, W. C. Brumfield and W. W. Henry are interested.

REDLANDS, CAL.—Press reports state that the trustees have taken the first steps for the municipal works. Later on a proposition will be made to issue bonds from $8,000 to $15,000 for the purpose of making investigations as to the sources, etc., of a water supply, and the cost. W. P. McIntosh has made a proposition to sell to the city the Mentone Tunnel, 1,300 ft. long, in the bed of Mill Creek Canyon, in which there has been developed 75 ins. of water, and an excavation partly made for a submerged dam, for $125,000.

SAN MATEO, CAL.—This city will vote Oct. 22 on the question of issuing $80,000 in bonds for works. Engr., C. E. Moore, Santa Clara, Cal.

SAN PEDRO, CAL.—The trustees will probably soon submit to the voters the question of issuing about $50,000 in bonds for new works.

SALT LAKE CITY, UTAH.—The city engineer has been directed to investigate the sources for an additional water supply. The council has appropriated $2,500 to pay for surveys, etc. Councilmen Robertson, Callister and Morris may be addressed.

SANDY, UTAH.—The Sandy Pipe Line Co. has been incorporated to build works and an irrigation plant in this place; capital stock, $5,000. C. C. Craps, A. G. Robertson and Wells Clark are interested.

VERDUN, QUE.—Matthew Dineen, Montreal, Que., has been awarded the contract for laying 2,750 ft. of 10-in. main for the works. The Three Rivers Iron Works Co., Montreal, has been awarded the contract to furnish the cast-iron water pipe and special castings. Work on the plant will begin Oct. 10. Plans and specifications for the complete works are not yet ready. Engrs., McConnell & Marion, New York Life Bldg., Montreal.

BARRIE, ONT.—Two of the three arbitrators engaged to make a valuation of the works of the Barrie Water-Works Co. in order that the city might purchase the plant have estimated the works to be worth $70,684 with interest. A report states that the Council has passed a by-law to be submitted on Nov. 14, asking authority to issue bonds to raise $100,000 to be used in purchasing the water-works, paying the expenses of the arbitration, and extension of the system to other parts of the town.

TORONTO, ONT.—Bids are asked until Oct. 26 for filling the old filter basin on the island. Mayor and Chn. Bd. Control, John Shaw.

YMIR, B. C.—The Ymir Water-Works Co. has been incorporated to build works to cost about $2,500.

IRRIGATION.

GREAT FALLS, MONT.—Reports state that the Conrad Investment Co. awarded a contract to Daniel McGovern for 3½ miles of irrigating canal, near Dupuyer.——The commissioner of Indian affairs has been authorized to spend $34,000 for improving the irrigation system on the Fort Belknap reservation, according to reports.

SHIELDS, MONT.—It is reported that Henry Shadean, Shields, has filed with the county clerk a notice of location, claiming 160 inches of the waters of Crazy Creek, to be used for irrigating purposes.

BEAUMONT, TEX.—The Beaumont Irrigation Co., Beaumont, has awarded a contract to Andrews & Son, New Orleans, La., for constructing a 12-mile twin levee irrigating canal in this county. The contract was previously let to E. A. Hayne. A. F. Goodhue, Pres., and W. S. Davidson, Secy. and Treas., Beaumont.

KIONA, WASH.—Frank Dudley, Niagara Falls, N. Y., has purchased the Kiona ditch and will award a contract for repairing and enlarging it, according to reports.

LOS ANGELES, CAL.—The Santa Ana Valley Irrigation Co. held a meeting, Oct. 4, to consider the question of improving the irrigation system, according to reports.

SANTA ANA, CAL.—It is intended to raise $15,000 to be expended in the cementing and extension of ditches throughout this district. Address M. Nisson, Santa Ana.

CHEYENNE, WYO.—The Wyoming Development Co. proposes to build a storage reservoir on the Laramie plains, and is arranging to commence work at once to store the waters of the Laramie River during the next flood season. The reservoir will be built near the McGill ranch, 20 miles east of Rock Creek. The dam will be 30 ft. high, and the reservoir will cover 5,060 acres and contain 80,000 acre-ft. of water; estimated cost, $65,000, according to reports.

NEW COMPANIES.—Western Ditch & Land Co., Denver, Colo.; $35,000; James H. Crandall, John B. Andrews, W. G. Brown, Denver.

North Side Irrigation Ditch Co., Craig, Colo.; $25,000; Charles A. Seymour, J. Lee Tower, George D. Woolley, Alexander S. Robinson and A. M. Raney, Craig.

New Deal Water Co., Los Angeles, Cal.; $100,000; to acquire wells, pipe lines, flume, ditches, etc., in Los Angeles county; W. T. Michael, J. E. Marsh, D. C. Tegue, William Ferry, H. O. Mace.

Lompoc Valley Water Co., Lompoc, Cal.; $100,000, with $80,400 paid in; to deal in water, construct canals, dams, etc.; E. E. Hall, H. S. Hall, A. G. S. Hall, H. Poland and C. A. Stilson.

Portersville Water Development & Improvement Co., Portersville, Cal.; $10,600; to do a general aqueduct and irrigation business; G. T. Frost, W. C. Brumfield, W. W. Henry, James Wilson, H. F. Brey.

SEWERAGE.

HAVERHILL, MASS.—The aldermen are considering plans for a trunk sewer or sewage disposal beds for the new Hale hospital buildings. Wm. W. Roberts writes that no action has yet been taken.

INDIAN ORCHARD, MASS.—R. D. Maynard, of Springfield, Mass., has been awarded the contract for building a sewer in this place, at $2,397.

BROOKLINE, MASS.—T. F. Crimmings and C. E. Trumbull & Co. have been awarded the contract for building sections 1 and 2 of the 26 × 39-in. brick sewer to connect with the Metropolitan sewer, at $2,960 and $8,081, respectively.

LAWRENCE, MASS.—R. J. Shea, Cy. Audr., writes us that a loan of $75,000 has been authorized for sewers. The sewers are being constructed under the direction of the superintendent of streets. Cy. Engr., Arthur D. Marble.

WEBSTER, MASS.—It is probable that the system will be extended next year at a cost of about $20,000.

BUFFALO, N. Y.—Bids are asked until Oct. 26 for constructing a 3½ and 2¼-ft. brick sewer in Bryant St. Secy. Bd. Pub. Wks., R. G. Parsons.——The committee has recommended the construction of the Emslie and Van Rensselaer St. sewer at a cost of $90,000. The ordinance recently passed by the council was vetoed by the Mayor.

LANSINGBURG, N. Y.—Chas. A. Roemer, Village Engr., writes us that the village is awaiting a reply from the state board of health in regard to a trunk sewer, which it is proposed to build to drain the low lands in the Fourth Ward.

OWEGO, N. Y.—Surveys are being made for an extension to the system.

SYRACUSE, N. Y.—It is proposed to build a trunk sewer in the First Ward at a cost of about $60,000. Bids will probably soon be asked. Alderman Costello may be addressed.

UTICA, N. Y.—The council is again considering the question of a new sewer in Neilson and Mills Sts. The sewer was first recommended by Rudolph Hering, 100 William St., New York. Alderman Luker may be addressed.

ALLENHURST, N. J.—The question of purchasing the plants of the Coast Water & Sewer Co. will be voted upon Nov. 4.

GLOUCESTER, N. J.—The council has voted to build a sewer in Ridgeway St.

HOBOKEN, N. J.—Bids are asked until Oct. 26 for cleaning and repairing the Newark St. sewer. Cy. Clk., M. V. McDermott.

SOUTH ORANGE, N. J.—It is stated that Robert S. Sinclair, Chn. Joint Sewerage Com., having in charge the proposed sewer for West Orange, South Orange, Vailsburg, Irvington and Millburn, reported, Oct. 17, that the engineer had submitted a plan to the committee for a joint outlet sewer from a point about two miles south of Irvington, emptying into Staten Island Sound, where it would have an outlet into 20 ft. of water, with a rapid tidal flow. This was so far removed from existing water rights as to

be unlikely to be affected by any action of the Passaic Valley Commission. The estimated cost of the outlet is $110,000, exclusive of the rights of way, which it is thought will not prove excessive.

SPRING LAKE, N. J.—Bids are asked until Nov. 1 for constructing about 4,600 ft. of pipe sewers and ocean outlet for the same, as stated in our advertising columns. Bids were opened Oct. 15 for the purchase of $70,000 of 20-year 5% sewer and water bonds. Engrs., Lehlbach Bros., 770 Broad St., Newark, N. J.; Mayor, E. V. Patterson.

STOCKTON, N. J.—B. F. Sweeten & Son, Camden, N. J., have been awarded the contract for building a sewer in Federal St.

NEW HAVEN, PA.—The council has decided to spend $6,500 for sewers, etc. Burgess. J. B. Maloney.

WARREN, PA.—Four citizens have subscribed $4,000 towards the state hospital sewage disposal plant. This amount, together with the state appropriation of $10,000, will probably be sufficient to commence the building of the plant at once.

WASHINGTON, D. C.—Capt. Lansing H. Beach, U. S. Engr. and Engr. Comr. for the District of Columbia, writes us as follows in regard to the improvements to the system: Several years ago plans were prepared by a board of experts for a system of sewage disposal for Washington, providing for the construction of intercepting sewers and the collection of all sewage at the foot of New Jersey Ave., from which point it was to be pumped across the Anacostia River and flowed by gravity to such a point down the Potomac River that there would be no danger of its being carried back to the city by the inflowing tide. About $500,000 worth of work has been done upon the intercepting sewers to date; the entire system is estimated to cost about $4,000,000. The appropriations made by congress during its last session provided for the construction of some more of the interceptors and the preparation of plans for the sewage pumping station. This work is now in progress.

NORFOLK, VA.—Jas. L. Winston writes us that another election will be held Nov. 8 to vote on the question of building sewers in the Brambleton Ward, at a cost of about $105,000.

WINSTON, N. C.—It is stated that certain northern parties interested in the proposed manufacturing plants to be built here, will take steps for the construction of a system and water-works.

NEW ORLEANS, LA.—The New Orleans Sewer Co. has submitted a proposition to the council for the construction of a system. The company offers to furnish a bond for $50,000. Work on the system will begin within six months after signing the contract. Councilman Clark has introduced an ordinance instructing the city engineer to prepare plans and specifications for the sewering of New Orleans, and submit the same to the council with the object of adjudicating a franchise for the sewering of the city in accordance with the terms of the charter, which provides that all franchises shall be sold to the highest bidder. Mr. Dreyfous has introduced an ordinance inviting all persons desiring to compete for the erection and operation of a sewerage system, to present their plans and propositions within 30 days, all further negotiations with the old sewerage company in the meantime to be broken off. Secy. New Orleans Sewerage Co., Samuel Henderson, Jr.

CHATTANOOGA, TENN.—The question of improving the Washington St. sewer at a cost of about $10,000 is being considered.

MEMPHIS, TENN.—Bids are asked until 12 noon, Oct. 21, for furnishing the materials and for building 5,800 ft. of 4-ft. brick sewer, etc., from the city limits to the Wolf River; check, $500. Mayor, J. J. Williams.

EAST CLEVELAND, O.—The following bids were received, Oct. 10, for constructing sewers in a number of streets, and also for a sewage disposal plant; all bidders of Cleveland when otherwise not stated: Sewage disposal plant; Herbert Tate, New York, $21,787; D. A. Tompkins Co., Charlotte, N. C., $20,670. Sewers: Cleveland Contracting Co., $11,515, $9,609 for section Nos. 3 and 4, respectively; R. J. Clements, $14,309, $14,204; R. H. Gray, $13,134, $11,222; Wm. McDowell, $15,169, $11,984; The Northern Ohio Paving & Construction Co., $15,999, $13,197; Ford P. Beers, $14,178, $11,423; R. P. Burnett, $23,183, $17,884; Clements Bros. Construction Co., informal, $13,188. Engrs., The Walter P. Rice Engineering Co., Society for Savings Bldg., Cleveland; Clk., N. A. Chapman.

ST. BERNARD, O.—Jos. Schwegman, Mayor, writes us that the council has done nothing definite towards the construction of a system.

BEARDSTOWN, ILL.—The question of improving the system and of paving certain streets is being considered.

CHICAGO, ILL.—Bids are asked until Oct. 28 for constructing pipe sewers in a number of streets. L. E. McGann, Comr. Bd. Pub. Wks.

FARIBAULT, MINN.—O'Neil & Son, Faribault, have been awarded the contract for building a sewer in the east side, at a cost of $10,000.

SIOUX FALLS, S. DAK.—The South Side Sewerage Co. has been incorporated with a capital stock of $12,000 by Park Davis, Adrian L. Peck and C. O. Bailey.

TOPEKA, KAN.—The question of building a sewer in North Topeka will soon be considered again by the council.

CARROLLTON, MO.—Wm. Riblett, Cy. Clk., writes us that an election will be held Oct. 25 to vote on the question of issuing $50,000 in bonds for constructing a system and for paving. Alex. Trotter, Thos. B. Goodson and Herman David are on the committee.

INDEPENDENCE, MO.—An election will be held Nov. 1 to vote on the question of issuing $75,000 in bonds for extending the system and water-works.

KANSAS CITY, MO.—Mike Walsh has been awarded the contract, at $38,598, for building the Vine St. sewer.

MACON, MO.—F. W. Blees has offered to donate $5,000 to aid in the construction of the proposed system, to cost about $25,000.

MADISON, MO.—The question of issuing $50,000 in bonds for a system is being considered by the village board, according to reports.

ST. JOSEPH, MO.—It is proposed to construct 15 and 12-in. pipe sewers in two streets. Cy. Clk., C. S. Shepherd; Mayor, P. J. Kirchner.

SHERMAN, TEX.—A. A. Fielder, Mayor, and Geo. E. Hardwicke are in Philadelphia, Pa., to confer with Geo. W. Ruch, in regard to building the proposed system, to cost about $200,000.

GRAND JUNCTION, COLO.—The question of constructing a system is being considered.

PALO ALTO, CAL.—This place will vote about Oct. 22 on the question of issuing $40,000 in bonds for a system. Engr., C. E. Moore, Santa Clara, Cal.

VERDUN, QUE.—Plans and specifications for the proposed system and water-works are not yet ready, but work on certain pipe laying has already been begun. Engrs., McConnell & Marion, New York Life Bldg., Montreal, Que.

GARBAGE DISPOSAL—STREET CLEANING

NEWTON, MASS.—The question of building a garbage disposal plant is being considered. It is proposed to ask Watertown and Waltham to join in the construction and the use of it.

BRIDGEPORT, CONN.—The board of health is securing information about garbage disposal plants; estimated cost, $12,000.

BUFFALO, N. Y.—Henry P. Burgard, Prudential Bldg., Buffalo, who was recently awarded the contract for cleaning District No. 12, under the 5-year contract, will soon begin work. It is said that he has not yet purchased the necessary cleaning and sweeping machines.

NEW ROCHELLE, N. Y.—It is reported that Frederick Lorenzen has recommended the construction of a plant.

ATLANTIC CITY, N. J.—M. V. Smith, Philadelphia, has been awarded the contract for constructing a garbage crematory, at $27,500, this bid being lower than Thos. Dalzell's, at $29,900.

NORRISTOWN, PA.—L. Lemish, Philadelphia, has submitted a proposition to the board of health to remove and dispose of the garbage of the city.

READING, PA.—The General American Reduction Co., Philadelphia, has been awarded the contract, at $3,250, for reconstructing the crematory, according to reports.

ATLANTA, GA.—The question of hauling the city garbage to the dumps by the cars of the Collins Park & Belt St. Ry. Co. is being considered by the city officials. The city pays $60,000 a year for collecting and hauling the garbage, and it is thought that this plan will save the city about $16,000 a year. The mayor is in favor of a new crematory.

NEW ORLEANS, LA.—Councilmen Clark and Dreyfous have introduced an ordinance authorizing the council to ask for bids for the construction of two garbage plants, one in the upper and the other in the lower section of the city.

LOUISVILLE, KY.—The aldermen and the board of health are considering the question of the city's purchasing a plant.

MANSFIELD, O.—The council is again considering the question of better methods for the disposal of the garbage.

MILWAUKEE, WIS.—Local papers state that the plans for the garbage crematory to be erected on Jones' Island were submitted to the board of public works Oct. 7. The building will be 140 × 44 ft., on foundation walls, and two stories high, constructed of brick with a slate roof. There will also be a coal shed, 156 × 28 ft., 1-story high, also of brick with a slate roof. The plant will be built by the Engel Cremation & Sanitary Co., as noted last week.

GAINESVILLE, TEX.—Press reports state that the council will rebuild the garbage crematory, destroyed by fire Oct. 5.

HOT SPRINGS, S. DAK.—The City Garbage Co. has been incorporated, with a capital stock of $12,000, by Alex. McDonald, of Omaha, Neb., and Chas. L. Fargo, of Hot Springs.

MITCHELL, S. DAK.—The council has authorized Councilman Edwards and the board of health to investigate the subject of a garbage crematory.

OAKLAND, CAL.—J. W. Northup has applied for a 50-year franchise to collect and cremate garbage. Mr. Northup, it is stated, represents the company recently granted a like franchise in San Francisco.

SAN FRANCISCO, CAL.—Bids were asked until Oct. 17 for collecting and removing the garbage and refuse for a period of two years from Jan. 1, 1899; bond, $12,500. Clk. Bd. Supervisors, Jno. A. Russell.——Local papers state as follows: A communication was received Oct 7 by the supervisors from the Merchants' Association, asking that action be postponed on the garbage collection contract until Oct. 24, for the reason that the specifications for the proposed work do not appear to be satisfactory. The association stated that it is collecting data from other cities.

STREETS AND ROADS.

QUINCY, MASS.—C. F. Knowlton, Comr. Pub. Wks., informs us that the sidewalks mentioned in our last issue have been constructed.

ROCHESTER, MASS.—Bids are asked until Oct. 24 for constructing a highway about seven-eighths of a mile long. J. Dwelley, County Comr., Plymouth, Mass.

SUDBURY, MASS.—Bids are asked until 12 m., Oct. 20, for building about 3,000 lin. ft. of highway. T. C. Mendenhall, Chn. Mass. Highway Comn., Boston.

FERRYVILLE, CONN.—Bids are asked until 2 p. m., Oct. 21, for grading a section of the Flag Hollow Hill Road. Henry E. Hinman, First Selectman, Plymouth, Conn.

THOMASTON, CONN.—Bids are asked until Oct. 22 for grading on North Main St. Aaron Thomas, First Selectman.

WOODBURY, CONN.—Bids are asked until Oct. 24 for grading and graveling on Main St. Chas. S. Curtiss, First Selectman.

ALBANY, N. Y.—Horace Andrews, Cy. Engr., is preparing plans for paving on Elizabeth, Hamilton, Rose and Dove Sts., to be constructed in 1899.

COHOES, N. Y.—Bids are asked by the public improvement commission until Nov. 9, for grading and paving of South Saratoga St.

NEW LEBANON, N. Y.—Bids are asked until 12 m., Oct. 20, for improving the road from New Lebanon to Pittsfield, Mass. C. W. Adams, State Engr., Albany.

OLEAN, N. Y.—Bids are asked until October 29 for constructing a brick pavement on concrete foundation, on South St., about 1,200 sq. yds., as stated in our advertising columns. F. L. Bartlett, Chn. Pub. Wks.; E. E. Allen, Supt. Sts.

PATCHOGUE, (L. I.), N. Y.—Jas. T. Losee, Village Clk., informs us that no steps have been taken for new sidewalks on Main St. and Ocean Ave.

SALAMANCA, N. Y.—The council has awarded a contract to Shean & McGann, Dunkirk, N. Y., at $15,000, for about 9,755 sq. yds. of brick paving.

SYRACUSE, N. Y.—The following bids were received, Oct. 10, for paving North Salina St., from James to Fulton St., and Fulton St., from Salina St. to Belden Ave. Empire Contracting Co., Alcatraz asphalt, $29,260.80; Warren-Scharf asphalt, $29,260.80; Warren-Scharf Asphalt Paving Co., Trinidad asphalt, $29,227.60; Columbia Construction Co. (accepted), Trinidad asphalt, $29,014.70; Asphaltina Construction Co., asphaltina, $29,036.50.

UTICA, N. Y.—Bids are asked until Nov. 1 for the purchase of $8,000 of 6% road bonds, according to reports. W. E. Richards, County Treas.

FORT HANCOCK, N. J.—Bids are asked until Nov. 3 for grading, constructing roads, walks, etc: Capt. G. G. Bailey, Q. M., Army Bldg., Whitehall St., New York.

PITTSBURG, PA.—Bids are asked until Nov. 3 for improving certain highways. F. W. Patterson, County Engr.; W. E. Thompson, County Controller.

SHIPPENSBURG, PA.—Reports state that the council is considering the question of issuing $10,000 in bonds for street improvements.

WASHINGTON, D. C.—Bids are asked until 12 m., Oct. 22, for grading Michigan Ave. J. B. Wight, Chn. Comrs.

NORFOLK, VA.—W. T. Brooke, Cy. Engr., has estimated the proposed paving on Brambleton Ave., 19,000 sq. yds., with Belgian block, at $32,300, with brick, $36,100; Park Ave., 13,600 sq. yds., with Belgian block, at $23,120, with brick, at $25,840. Messrs. Ferrebee, Gale and Sterling, Bd. of Local Improvements, have been appointed a committee to consider the question of issuing $20,000 in bonds for the work.

PETERSBURG, VA.—N. T. Patterson, Pres. Com. Council, informs us that the question of paving is being considered by the street committee which will probably report at the meeting of the council Nov. 1. It has not yet been decided whether Sycamore St. will be paved with brick or asphalt.

MONROE, LA.—The street committee has been authorized to contract with the Talbot Paving Co., Detroit, Mich., for the paving of Desiard St., from the river to Sixth St., according to reports.

NEW ORLEANS, LA.—Bids are asked by the Orleans & Jefferson Ry. Co., Ltd., until Oct. 28, for grading on Napoleon Ave., and for grading and paving the Metairie Road. Robt. R. Zell, Engr., 708 Union St.

LOUISVILLE, KY.—Bids are asked until 12 m., Oct. 24, for grading, curbing and brick paving on portions of 12 streets. Chas. F. Grainger, Chn. Bd. Pub. Wks.

AKRON, O.—The council has awarded a contract to P. T. McCourt & Co., for brick paving on Bittman St., from Maple to Crosby St.

CAMBRIDGE, O.—Bids are asked until Oct. 24 for the purchase of $24,000 of 4½% street paving bonds, according to report. T. R. Deselin, Cy. Clk.

CINCINNATI, O.—The following bids have been received by the board of city affairs for improving Delta Ave.: William Fogarty, (accepted), $23,822; A. J. Strauss, $24,678; Queen City Construction Co., $24,892; J. M. Quill, $25,399.60; J. W. Sullivan, $25,664; A. J. Henkel & Bro., $25,727; Vansandt & Medes, $26,800; T. Evans, $24,607; McCaren & Dawson, $26,943; D. Foltz Asphalt Co., $26,247; T. Folz, $25,008; N. J. Williams, $26,067; J. A. Ebersole, $26,267.

DAYTON, O.—Bids are asked until 12 m., Oct. 21, for grading, graveling and paving in five alleys. J. L. Baker, Pres. Bd. Cy. Affairs.

FINDLAY, O.—Bids are asked until Oct. 27 for grading, draining, macadamizing, etc., on East Hardin St., from Main to East St. A. W. Ray, Clk.

RICHWOOD, O.—Bids are asked until Oct. 24 for the purchase of $6,000 of 6% sidewalk bonds, according to report. S. D. Evans, Village Clk.

SALEM, O.—Bids are asked until Oct. 25 for the purchase of $5,047 in paving bonds, according to report. Geo. Holmes, Cy. Clk.

TOLEDO, O.—It is stated that the viewers have reported favorably on the proposed stone road, about 18 miles long, to connect Maumee, Waterville and Whitehouse, at a cost of about $80,000. The question will soon come before the county commissioners.

WARREN, O.—Bids are asked until Oct. 28 for furnishing the material and constructing 1,400 lin. ft. of curbing and drain tile, 800 cu. yds. of excavation and 2,400 sq. yds. of macadam. A. E. Andrews, Cy. Clk.

GREENCASTLE, IND.—Reports state that a contract has been awarded to O'Brien & Co., Cloverdale, Ind., at $11,500, for macadamizing in Warren township.

INDIANAPOLIS, IND.—Bids are asked until Oct. 24 for asphalt paving, etc., on 14th St., and brick paving on Geisendorf St. M. A. Downing, Chn. Bd. Pub. Wks.

GRAND RAPIDS, MICH.—Geo. W. Ames, Cy. Engr., informs us that nothing has been done toward the repaving of Canal St. besides securing estimates.

CARTHAGE, ILL.—N. P. Berry, Mayor, informs us that about three-fourths of a mile, 40 ft. wide, will be paved with brick, early next summer.

CHICAGO, ILL.—Bids are asked until October 28 for constructing cement sidewalks on about 20 streets. L. E. McGann, Pres. Bd. Local Improvements.

DECORAH, IA.—E. Mather writes us that the council has decided to pave about 1,000 lin. ft. There will be nothing done this season. T. F. Acechmoody, Cy. Clk.

ST. PAUL, MINN.—The county commissioners awarded a contract, Oct. 10, to John W. Fleetham, at $16,985, for macadamizing about 2 1-7 miles, on Rice St. and White Bear Road.

LEAVENWORTH, KAN.—J. D. Edmond, Mayor, writes us that at the last meeting of the council bids were received for brick and asphalt paving, but have been rejected. New bids are now being asked. He also states that considerable paving will be laid in the near future.

CARROLLTON, MO.—Wm. Riblett, Cy. Clk., writes us that an election will be held, Oct. 25, to vote on a proposition to issue $50,000 in bonds for paving and constructing sewers. Alex. Trotter, Thos. B. Goodson, Herman David and others, compose the committee.

KANSAS CITY, MO.—The park board has awarded a contract to Adam Armstrong, at $34,454, for paving Benton Boulevard, between 24th and 31st Sts., and to Bunton, Schryer & McGannon, Indianapolis, Ind., at $49,127, for constructing sidewalks, curb, gutter, etc., on Benton Boulevard, between Independence Ave. and 31st St.

MARSHALL, MO.—Bids are asked until Oct. 26 for furnishing and constructing Trinidad asphalt pavement and stone curb on portions of Lafayette Ave., Jefferson Ave., North and Arrow Sts. Jno. G. Miller, Mayor; A. R. James, Clk.

ST. LOUIS, MO.—Bids are asked, until 12 m., October 21, for furnishing and constructing granitoid walks around market. Robert E. McMath, Pres., Bd. Pub. Wks.

BEAUMONT, TEX.—Aldermen Kelly, Ives and Millard have been appointed a committee to secure plans and specifications of different kinds of paving, according to reports. D. P. Wheat, Mayor.

TACOMA, WASH.—Reports state that County Surveyor Bullard has completed a survey for a new road from Carbonado to Mount Ranier, and work will soon be commenced.

SAN FRANCISCO, CAL.—The board of supervisors has passed a resolution to pave Market St. with bitumen, between Sixth St. and Van Ness Ave.

WINNIPEG, MAN.—Bids are asked until Oct. 27, for asphalt paving on Poladd Ave., about 18,000 sq. yds., according to reports. C. J. Brown, Cy. Clk.

MANUFACTURING PLANTS

OAKVILLE, CONN.—It is reported that plans have been prepared for a 2-story office building and two additions to the factory of the Oakville Co., to cost about $30,000. Arch., Theo. B. Peck, 65 Bank St., Waterbury, Conn.

BUFFALO, N. Y.—The Buffalo Co-operative Brewing Co. filed plans, Oct. 10, for a new brick building to replace the present plant at High and Michigan Sts., to cost about $84,000.

OSWEGO, N. Y.—George Barlow, of Seneca Falls, N. Y., has been awarded the contract for the masonry work on the foundation of the McGowan brewery.

CAMDEN, N. J.—The oilcloth and pattern factory of Dorner & Visser was destroyed by fire Oct. 13, causing a loss of about $35,000.

HARRISON, N. J.—The Berlin Iron Bridge Co., of East Berlin, Conn., is erecting an extension, 51 × 152 ft., to the foundry of the Benjamin Atha & Illingworth Co., at Harrison. The framework is to be of steel throughout; the sides are covered with corrugated iron on steel purlins, and are arranged for suitable doors and windows. The side columns support a 30-ton electric crane having a span of 46 ft. The roof construction is of steel trusses and purlins arranged with openings in the roof for skylights.

JERSEY CITY, N. J.—A fire in this city, Oct. 9, damaged the storage building of the Eagle Brewery, at 186 9th St., causing a loss of about $45,000.

WILMINGTON, DEL.—The 5-story morocco factory of Tadham & Hickman, at 208 West 4th St., was burned Oct. 7, causing a reported loss of $35,000.——Reports state that extensive improvements are to be made to the works of the Johnson Forge Co., at Wilmington.

MACON, GA.—A fire in this city Oct. 13 destroyed the candy and cracker factory of the Winn-Johnson Co., and adjoining buildings, causing a total loss of about $125,000.

COTTONPORT, LA.—It is reported that the sugar refinery on the Dora plantation, owned by F. Regard, was destroyed by fire, Oct. 11, causing a loss of about $75,000; insurance, $40,000.

MAUMEE, O.—The Dewey Glass Co., of Cincinnati, will erect a 24-pot window factory at Maumee, according to reports. It will cost $50,000, and will be completed in six months.

DETROIT, MICH.—A building permit has been granted for the erection of a factory and warehouse building for the Boydell Bros. White Lead & Color Co., at Champlain and Beaubien Sts., to cost $50,000. Archs., A. C. Varney & Co., 48 Campau Bldg.

UNION CITY, MICH.—A recent fire at the Peerless Portland Cement Co.'s works destroyed property valued at about $40,000. The new $200,000 brick and iron factory had just commenced operations.

MILWAUKEE, WIS.—Reports state that new additions will be built to the trunk factory of Abel & Bach, at St. Paul Ave. and 18th St., to cost about $75,000.

GAS PLANTS.

SOMERSET, KY.—The Kentucky Oil & Pipe Line Co. has awarded a contract to the National Tube Works Co., Pittsburg, Pa., at about $45,000, for the construction of a pipe line from Somerset to Slick Ford, a distance of about 36 miles; capacity, about 2,500 bbls. per day. H. W. Breckenridge, Gen. Mgr., Wellsville, N. Y.

CHARLOTTE, N. C.—The Consolidated Gas Co., Philadelphia, Pa., has decided to purchase the works of the Charlotte Gas Light Co. for $50,000. The plant and service will be enlarged and new apparatus and machinery will be installed.

DAYTONA, FLA.—Reports state that the council is considering the question of constructing acetylene gas works. Address E. Dillingham.

MASSILLON, O.—The council has granted a franchise to the East Ohio Gas Co. It has been proposed to lay eight miles of pipe within four months, and within one year 20 miles must be laid. Natural gas will be piped from West Virginia, according to reports.

NEW COMPANIES.—Louisville Gas Co., Louisville, Ky.; $15,000; Frederick Forcht, Jr., Albert Struby and Joseph O'Donnell.

James Oil Co., Charleston, W. Va.; $250,000 with $35 paid in; to operate for oil and gas; L. James, A. C. Hickel, J. H. Gaines, D. J. W. Clarkson, J. A. Jones, Charleston, W. Va.

Somerset Gas Light Co., 32 Division St., Somerville, N. J.; $25,000, with $5,000 paid in; to construct, maintain and operate gas works; A. M. Young, New York; James L. Griggs, Chas. R. Knapp, John R. Garretson, Chas. J. Smith, A. G. Anderson, C. H. Bateman, James Brown, Jr., Peter Struve, Mathew P. Lane, Somerville, N. J.

Kentucky Oil & Pipe Line Co., Somerset, Ky.; $50,000; E. B. Sayre, Lexington, Ky.; George B. White, Paris, Ky.; J. A. Geary, Lexington, Ky.; J. B. Henady, Somerset, Ky.; H. W. Breckinridge, Weltville, N. Y.; O. H. Waddle, Somerset, Ky.; F. M. Hardin, Winton Place, O.; R. Kolker, Somerset, Ky.

American Gas Engine Co., Fort Wayne, Ind.; $50,000; O. N. Guldin, E. F. Lloyd, Fort Wayne; Wm. W. Goodwin, Bordentown, N. J.; Wm. Henry White, New York, E. W. Mumford, Philadelphia, Pa.

Canisteo Gas Co., Canisteo, N. Y.; $25,000; to manufacture and supply gas; J. B. Bradley, Bolivar; E. C. Bradley, Wellsville; William T. Morris, Penn Yan.

Home Gas & Water Co., Cicero, Ind.; $15,000; to construct a gas plant this fall and a water-works system next spring; William Michel, William H. Roney, Emil Dietz, George J. Hall, William J. Case.

MISCELLANEOUS CONTRACTS.

WHARF.—Baltimore, Md.—C. C. Buckman proposes to construct a wharf 200 ft. long at Calvert St., according to reports.

LEVEE.—Union City, Tenn.—The county court has authorized an appropriation of $5,000 for a levee across the Ohio River bottom.

SURVEY.—Olympia, Wash.—Bids are asked until Nov. 8 for surveying certain districts. W. McMicken, U. S. Surveyor-Gen., Olympia.

CHEMICAL FIRE-ENGINES.—Albany, N. Y.—The fire commissioners have decided to purchase two chemical fire engines, according to reports.

BONDS.—Troy, O.—Bids are asked until Oct. 22 for the purchase of $7,000 of 6% ditch bonds, according to reports. J. T. Bartmess, County Audr.

DAM.—Wichita, Kan.—The council has awarded a contract to J. R. Burton, at $2,633, for furnishing the material and constructing a dam across the Little River.

LEVEE WORK.—New Orleans, La.—Bids are asked by the board of state engineers, until 12 m., October 20, for about 31,500 cu. yds. of levee work on sections 3 and 4.

DREDGING.—Coos Bay, Ore.—Bids are asked until Nov. 15 for dredging in Coos Bay, as stated in our advertising columns. Maj. W. L. Fisk, U. S. Engr., Portland, Ore.

HARBOR WORK.—Stockton, Cal.—Bids are asked until Nov. 2 for improving the San Joaquin River and Stockton Channel. John Markley, Secy. Pub. Wks., Sacramento.

INSULATED WIRE.—Richmond, Va.—Bids were asked until Oct. 17 for furnishing the fire alarm department with about 10 miles of No. 10 B. & S. gage insulated wire. W. H. Thompson, Supt.

DREDGING.—Port Royal, S. C.—Bids are asked until until Nov. 12 for dredging at the U. S. naval station; appropriation, $100,000. M. T. Endicott, Ch. Bureau Yards and Docks, Washington, D. C.

DRAINAGE PUMPS.—San Francisco, Cal.—The Pumping Association in charge of the arrangements to drain the lower Comstock levels has asked for bids for furnishing the necessary pumping machinery.

FIRE ENGINE.—Laurel, Md.—This place will establish a fire department and will purchase an engine and other apparatus. Wm. H. Diven, Pres.; M. J. Tighe, Treas., and Lawrence A. Ellis, Ch. Engr., are interested.

STONE.—Brooklyn, N. Y.—Bids are asked until Oct 27 for furnishing large field stone or boulders, about 140,000 cu. ft., at Sunset Park. Geo. C. Clausen, Chn. Park Comrs., Arsenal, Central Park, New York.

TRAVELING CRANE.—Norfolk, Va.—Bids are asked until Oct 29 for furnishing an electric traveling crane and bridge, with a capacity of 40 tons, for the navy yard. Edwin Stewart, Paymaster Gen., Washington, D. C.

WHARF.—Palatka, Fla.—Reports state that the Georgia Southern & Florida Ry. Co. has awarded a contract to Capt. William Boyd for the construction of a new storage wharf, 30 × 250 ft. Jeff Lane, Gen. Supt., Macon, Ga.

STORAGE CYLINDERS.—Mare Island, Cal.—Reports state that bids will soon be asked by the navy department, Washington, D. C., for the erection of tanks for the cold storage cylinders at the navy yard; appropriation, $43,000.

FLOOD GATES.—Dayton, O.—Bids are asked until Oct. 25 for furnishing and constructing flood gates and masonry across the tail race owned by the Cooper Hydraulic Co., at Perry St. J. L. Baker, Pres.; J. E. Gimperling, Cy. Comptroller.

value. Well drills have also been introduced, but not in sufficient numbers to meet the demand. The windmills manufactured in the United States, if properly pushed, will meet with success. Samples and tests will produce quicker and better results than catalogues.

WELLS AND SHAFTS.—Gila County, Ariz.—Bids are asked until Nov. 5 for sinking wells and shafts to ascertain the depth of bed rock at a place on Gila River, known as Buttes, and also on Queen Creek. H. Rizer, Acting Dir. U. S. Geological Survey, Washington, D. C.

TIDE GATES.—Cohasset, Mass.—A hearing was to be given by the harbor and land commissioners, Boston, Oct. 12, to consider an application for permission to construct tide gates at Little Harbor. Address B. Preston Clark, Cohasset, or Woodward Emery, Chn., Boston.

FIRE ALARM SYSTEM.—Mobile, Ala.—Bids are asked until Oct. 22 for furnishing and installing a complete fire alarm system, including 52 signal boxes, about 35 miles of No. 12 copper wire, etc., as stated in our advertising columns. Cary W. Butt, Chn. Com.; J. C. Bush, Mayor.

TELEPHONE CONDUITS.—Harrisburg, Pa.—The Pennsylvania Telephone Co. has decided to lay the wires in conduits of creosoted wooden pipes made in Norfolk, Va. A new office building will be erected at Walnut St. and Court Ave.; also a new switch board will be established, to cost about $25,000.

LADDER TRUCK AND BOILERS.—New York, N. Y.—Bids are asked until Oct. 26 for furnishing one Haye's extension ladder truck and fire escape and for repairing 10 steam fire-engines, to be furnished with new Fox sectional water-tube boilers, etc. John J. Scannell, Fire Comr., 157 East 67th St.

CONTRACT PRICES.

LAYING WATER PIPE.—Boston, Mass.—The Metropolitan Water Board, 3 Mount Vernon St., Boston, received the following bids Sept. 15 for laying cast-iron water pipe in Revere and Saugus; the contract was awarded Mirick & Wentworth; Ch. Engr., Frederic P. Stearns:

Bids Received at Boston, Mass., Sept. 15, 1898, for Laying Cast-iron Water Pipe in Revere and Saugus.

Bidder.	Laying cast-iron pipe, 16-in., 19,200 lin. ft.	Laying cast-iron pipe, 4-in., for blw-offs, 200 lin. ft.	Excavation, Rock, Above grade, 25 cu.yds.	Excavation, Rock, Below grade, 10 cu.yds.	Excavation, Earth, Below grade, 10 cu.yds.	Setting air valves, 8, each.	Chambers for valves,* 18, each.	Concrete masonry, 10 cu.yds.	Total.
Mirick & Wentworth, Malden, Mass.	$0.53	$0.40	$3.00	$4.00	$0.50	$2.50	$40.00	$5.00	$11,166
Michael Russo, Boston, Mass.	.55	.50	3.00	3.00	.80	3.00	35.00	5.00	11,477
O'Rourke & Nelson, Boston, Mass.	.65	.25	2.00	3.50	.50	1.50	20.00	2.50	13,017
Bruno & Salomone, E. Boston, Mass.	.64	.30	2.50	2.50	.60	3.00	30.00	4.50	13,051
The C. H. Eglee Co., Boston, Mass.	.68	.68	3.50	5.00	1.00	3.00	40.00	6.00	14,144
C. W. Snyder & Son, Dayton, O.	.69	.50	4.00	5.00	.80	2.50	33.00	6.00	14,180
Chas. G. Craib, Winthrop, Mass.	.70	.25	6.00	6.00	1.00	3.00	35.00	6.00	14,424
Richard Falvey, Somerville, Mass.	.73	.40	3.00	3.00	.60	3.00	25.00	4.50	14,726
D. F. O'Connell, Boston, Mass.	.75	.50	4.00	8.00	1.25	3.00	45.00	6.00	15,587
L. A. Taylor, Worcester, Mass.	.85	.30	3.00	3.00	.60	3.00	25.00	5.00	17,015

*Less than 20 ins. diameter and air valves.

DRY DOCK.—Algiers, La.—Bids are asked until Nov. 30 (postponement from Oct. 31) for a combined floating and graving steel dock, with shore connections and appurtenances, for the U. S. naval reservation. M. T. Endicott, Ch. of Bureau, Washington, D. C.

WIRE.—Washington, D. C.—Bids are asked until 2 p. m., Oct. 21, for furnishing about 50 miles of stranded wire, seven ply; 50 miles stranded wire, insulated and braided, seven ply; 350 miles, No. 8, galvanized iron wire; 300 miles, No. 14, galvanized iron wire; 3,000 porcelain insulators. A. W. Greely, Ch. Signal Officer.

TELEPHONE LINE.—Charlotte, N. C.—The Queen City Telephone Co., Charlotte, has decided to establish a telephone service between Charlotte and Salisbury, a distance of about 50 miles, taking in several intermediate towns. Address J. A. Helvin, Queen City Telephone Co., and L. T. Coltraine, Concord local exchange, Concord, N. C.

WHARF, DREDGING, ETC.—St. John, N. B.—Bids are asked by the Intercolonial Ry. Co. until Oct. 26 for constructing a wharf 160 × 650 ft., using 60-ft. piles, dredging the berth to a depth of 28 ft. at low water, removing the rock, etc., and furnishing a diving outfit. A freight-shed will be built on the wharf. W. B. McKenzie, Ch. Engr., Monocton, N. B.; Station Master Ross, St. John.

PIERS, ETC.—Philadelphia, Pa.—The following requests have been presented to the board of port wardens for permission to construct piers, etc.: The William Cramp & Son's Ship Building Co., to fill a dock near Norris St.; the Pennsylvania R. R. Co., for a temporary rack of piles at Dock St.; Belt Line R. R. Co., for a track trestle, near Bridesburg; Thos. Clyde, for the extension of Pier No. 1; J. B. King Co., for a pier 350 × 60 ft. at Morton St., Chester, Pa.; Pennsylvania Steel Casting & Machine Co., Chester, Pa., for the extension of a bulkhead.

REFITTING TRANSPORT.—Washington, D. C.—The following bids have been received by the navy department for refitting the steamer "Massachusetts" as a permanent transport: The Atlantic Works, East Boston, Mass, $109,000; Morse Iron Works, $96,000, to be completed in 50 working days; Maryland Steel Co., Sparrow's Point, Md., $137,000, to be completed in 90 days; John N. Robins Co., $98,000; Newport News Shipbuilding & Dry Dock Co., Newport News, Va., $99,500, to be completed in eight weeks; William Cramp & Son's Ship & Engine Building Co., Philadelphia, Pa., $120,000, to be completed by Dec. 10 if turned over at once; if allowed to go to sea first, 60 days from date of delivery.

DREDGING.—Wilmington, Del.—Gen. W. F. Smith, U. S. Engr., received the following bids Oct. 10, 1898, for dredging a channel 100 ft. wide and 18 ft. deep from mouth of the Christiana River to the Delaware Pulp Works, and dredging will continue further up the river as far as the appropriation of $205,000 from the last Congress will permit:

Bidder.	Dredging, a cu.yd.	Capacity of plant, cu.yds. a day.	Work, To begin in days.	Work, To be completed.
Am. Dredging Co., Philadelphia*	$0.171	5,000	20	Aug. 31
Rittenhouse-Moore Co., Mobile.†	.18	6,000	60	June 30
Internat'l Cont'g Co., Syracuse*	.1499	4,000	15	Oct. 1.
Atlas Dredg. Co., Wilmington.*	.178	4,000	30	Oct. 1.
N. Y. Dredging Co., New York§	.12⅝	3,500	60	......
Baltimore (Md.) Dredging Co.*	.18	4,000	30	Oct. 1.
Sanford & Brooks Co, Baltimore‡	.195	.....	60	June 30
Simon Hess, New York*	.1428	3,500	30	Nov. 1
Removing Rock.				
Chas. W. Johnson, Lewes, Del.	13.45	.....	30	Sept. 30
Simon Hess, New York	20.00	25	60	July 1.
H. T. Dunbar & Co., Phila.‖	11.83	30	30	July 1.
P. Sanford Ross, Jersey City	14.70	..	30	Sept. 15
Isaac T. Brown, New York	13.45	25	30	Nov. 1.
Internat'l Cont'g. Co., Syracuse	19.00	25	30	July 1.
J. J. Fitzpatrick, Plattsburg, N.Y.	7.13	..	30	July 1.

*Measured in place; material to be deposited behind dikes along banks of Christiana. †Material to be thrown ashore. §Material to be deposited on Christiana marshes. ‡Material to be deposited on adjacent low lands or towed away. ‖$10.83 if a depth of 18.5 ft. is reached.

CEMENT.—Fort Washington, D. C.—The following bids were opened Oct. 10, 1898, by Lieut.-Col. Chas. J. Allen, U. S. Engr., Washington, D. C., for furnishing 2,000 bbls. of Portland, and 11,000 bbls. natural cement at Fort Washington, D.C.; (1) natural cement, (2) Portland cement: New York & Rosendale Cement Co., New York—(1) Brooklyn Bridge brand, 69¾ cts. a bbl.; Lawrenceville Cement Co., New York—(1) Beach brand, 68 cts.; Maryland Cement Co., Baltimore, Md.—(2) Toltec brand, $2.15 a bbl.; Jas. H. McGill, Washington—(2) Atlas brand, $2.74.

DAM.—Columbus, O.—The following bids were received Oct. 3, in response to a second call for constructing the dam for a storage reservoir, and for furnishing cement for the same (should the city decide to buy it and furnish it to contractors); the first bids received for this work were published in our issue of Sept. 22:

Bids Received at Columbus, O., Oct. 3, 1898, for Construction of Dam for Storage Reservoir.

Quantities.		W. H. Luchtenberg, Columbus, O.	S. Carparis, Columbus, O.	J. Westwater, Columbus, O.	H. Karg, Fostoria; J. Whissel, Lancaster, Pa.	Assurance Construction Co., New York.	Fred M. Hooves Columbus, O.	Cleveland (O.) Contracting Co.	Willard & Cornwell, Louisville, Ky.	Greenville (O.) Construction Co.
Dry earth excavation	5,000 cu. yds.	$0.30	$0.30	$0.25	$0.20	$0.25	$0.30	$0.20	$0.24	$0.50
Wet earth excavation	3,500 " "	1.10	1.50	.75	1.00	1.30	1.00	.80	1.25	.80
Rock excavation	1,200 " "	1.10	1.50	.75	1.10	2.00	1.00	1.00	.80	1.50
Concrete mas'ry, cmt & labor.	20,000 " "	4.58	5.10	6.00	4.50	4.75	4.96	4.75	4.60	5.20
Without cement		2.48	2.20	3.50	2.35	2.20	2.06	3.50	2.45	3.60
Total, without cement		$56,270	$52,550	$74,810	$52,820	$54,200	$47,000	$75,000	$55,535	$79,100

WELL DRILLS AND WINDMILLS.—Cape Town, South Africa.—Press reports state that Consul J. G. Stowe, Cape Town, states that the demand for windmills in South Africa is to increase after the various systems of irrigation are established. A number of American windmills have already been introduced in South Africa, but as they are entered at the custom houses under the head of agricultural implements, it is not possible to ascertain the number or

Cement.—Pennsylvania Fuel Co., Columbus, "Bull Dog," in sacks, $2.15 a bbl.; imported, in barrels, $2.85. Standard Silicia Cement Co., 66 Maiden Lane, New York, in bbls., $2.34; in bags, $2.19. E. C. Stitt, Columbus, in paper sacks, $2.18. J. P. Carlisle, Columbus, $2.45 a bbl.; in cloth bags, $2.20; paper bags, $2.25. Acme Paving Co., Atlas, in bbls., $2.20; in cloth bags, $2.00; imported Largerdorfer, in bbls., $2,75, for 1899 delivery only.

IRON BRIDGE BEAMS.—Boston, Mass.—The following bids were received Oct. 6, 1898, by the Massachusetts State Highway Board for furnishing iron beams for bridges in the towns of Buckland, Brookfield, Lunenburg and Warren; contract awarded Walsh Boiler & Iron Works; Secy., A. B. Fletcher:

Bidder.	Towns, Buckland, cts.	Brookfield, cts.	Lunenburg, cts.	Warren, cts.
N. J. Steel & Iron Co., Trenton	3.24	3.17	3.29	3.19
Walsh B. & I. Wks., Springfield	2.5	2.4	2.5	2.3
Wr't Iron Bridge Co., Canton, O.	3.5	3.5	3.5	3.5
King Bridge Co., Cleveland, O.	4.1	4.0	4.2	4.0
Boston (Mass.) Bridge Works..	3.6	3.6	3.9	3.6
Berlin Iron Bridge Co., E. Berlin	4.0	3.52	5.0	3.5
Massillon (O.) Bridge Co......	3.5	3.5	3.5	3.5

ASPHALT PAVING.—New Orleans, La.—The following bids were received Oct. 10 for asphalt paving in Canal St.; A. C. Bell, Cy. Engr., is visiting several of the cities in which Belden & Seely have laid asphalt pavements, he will be away about two weeks:

SEWERS.—Sheboygan, Wis.—C. U. Boley, Cy. Engr., writes us that the following bids were received Oct. 1, 1898, for constructing certain sewers; contract awarded to Hackworthy Construction Co.:

Quantities.				R. Nommensen, Sheboygan.	Hackworthy Const'n Co., Appleton.	Wm. Schaetzer, Sheboygan.
Brick	42-in; depth,	8 ft.	943 ft.	$2.75	$2.73	$2.90
Brick	36-in.; "	9 "	400 "	2.40	2.38	2.58
Brick	30-in.; "	15 "	2,212 "	2.40	2.38	2.35
Pipe.	18-in.; "	12.3"	1,379 "	1.00	.88	1.30
Pipe.	15-in.; "	11.3"	2,049 "	.80	.69	.95
Pipe.	12-in.; "	10 "	1,739 "	.60	.58	.75
Manholes, each			47...	25.00	24.00	22.00
Total				$14,099	$13,555	$15,055

Note.—The 42-in. and 36-in. sewers are in dry sand; the 30, 18, 15, and 12-in. sewers are in sandy soil with quicksand and water below.

STATE HIGHWAYS.—Boston, Mass.—The Massachusetts State Highway Commission, 3 Mount Vernon St., Boston, awarded the following contracts Oct. 13, 1898, for building highways in certain towns; Secy., A. B. Fletcher, Boston: North Reading, Mass.—Contract awarded to C. H. Kelleher, Newburyport, Mass.: Excavation, 2,100 cu. yds., 25 cts. a cu. yd.; ledge excavation, 20 cu. yds., $2.00; rubble masonry—laid dry, 42 cu. yds., $4.50 a cu. yd.; laid in cement, 22 cu. yds., $8.00; gravel, 300 cu. yds., 45 cts.; Telford, 100 sq. yds., 20 cts. a sq. yd.; shaping, 6,274 sq. yds., 2 cts.; broken stone, in place, 1,506 tons, $1.30 a ton; 12-in. vitrified clay pipe, 30 lin. ft., 60 cts. a lin. ft.; fencing used as guard rail, 1,070 lin. ft., 20 cts.; side drains, 500 lin. ft., 35 cts.; stone monuments, 8, each $1.50; total, $3,587. Chelmsford.—Awarded to C. H. Kelleher, Newburyport: Excavation, 2,200 cu. yds., 25 cts. a cu. yd.; ledge excavation, 10 cu. yds., $2.00; rubble masonry—laid dry, 15 cu. yds., $5; laid in cement, 10 cu.yds.,$8; gravel 600 cu.yds.,45 cts.; Telford, 100 sq. yds., 30 cts. a sq. yd.; shaping, 11,592 sq. yds., 2 cts.; broken stone, in place, 3,043 tons, $1.90 a ton; 12-in. vitrified clay pipe, 50 lin. ft., 60 cts. a lin. ft.; fencing used as guard rail, 100 lin. ft., 20 cts.; side drains, 100 lin. ft., 20 cts.; stone monuments, 19, each $1.00; 10-in. vitrified clay pipe, 50 lin. ft., 50 cts. a lin. ft.; catchbasins, 1, $20.00; total, $7,173. Merrimac.—Awarded to M. Cashman, Newburyport: Excavation, 150 cu. yds., 32 cts., a cu. yd.; excavation, borrow, 1,000 cu. yds., 40 cts.; ledge excavation, 30 cu. yds., $1.50; rubble masonry—laid dry, 17 cu. yds., $3.00; laid in cement, 11 cu. yds., $5.00; gravel, 600 cu. yds., 60 cts.; Telford, 100 sq. yds., 40 cts. a sq. yd.; shaping, 3,705 sq. yds., 1¾ cts.; broken stone, in place, 890 tons, $1.35 a ton; 12-in. vitrified clay pipe, 30 lin. ft., 50 cts., a lin. ft.; fencing used as guard rail, 50 ft., 23 cts.; side drains, 800 lin. ft., 22 cts.; stone monuments, 9, each 75 cts.; total, $2,475. Extra work at following prices; materials at cost: Foreman, 40 cts, an hour; masons, 35 cts.; mason's helpers, 20 cts.; laborers, 16⅔ cts.; double teams and drivers, 45 cts.; single teams and drivers, 30 cts.; side drain extensions, 20 cts. a lin. ft.

STATE HIGHWAY.—Boston, Mass.—The Massachusetts State Highway Commission, Boston, awarded the following contracts for building state highways in Northboro, Sept. 22, 1898, and in Hadley and Walpole, Mass., Sept. 29, 1898; Secy., A. B. Fletcher: Northboro.—Fred. E. Ellis, Melrose: Excavation, 2,060 cu. yds., 40 cts.; ledge excavation, 150 cu. yds., $1.00; rubble masonry laid dry, 21 cu. yds., $6.00; rubble masonry laid in cement, 14 cu. yds., $9.00; gravel, 500 cu. yds., 45 cts.; Telford, 100 sq. yds., 30 cts.; shaping, 9,040 sq. yds., 2 cts.; broken stone in place, 2,170 tons, $1.20; 12-in. vitrified clay pipe, 30 lin. ft., 80 cts.; fencing used as guard rail, 120 lin. ft., 30 cts.; side drains, 100 lin. ft., 30 cts.; stone monuments, 22, each, $1.50; total, $4,389. Hadley.—A. J. Wellington, Boston: Excavation, 460 cu. yds., 50 cts.; excavation borrow, 600 cu. yds., 60 cts.; ledge excavation, 10 cu. yds., $4.00; rubble masonry laid dry, 10 cu. yds., $6.00; rubble masonry laid in cement, 10 cu. yds., $12.00; gravel, 300 cu. yds., 80 cts.; Telford, 100 sq. yds., 50 cts.; shaping, 5,717 sq. yds., 2 cts.; broken stone in place, 1,470 tons, $2.20; 12-in. vitrified clay pipe, 30 lin. ft., 70 cts.; fencing used as guard rail, 100 lin. ft., 25 cts.; side drains, 500 lin. ft., 50 cts.; stone monuments, 13 each, $1.50; total, $4,764. Walpole.—John J. Falvey, Somerville: Excavation, 2,570 cu. yds., 30 cts.; excavation, borrow, 200 cu. yds., 30 cts.; ledge excavation, 10 cu. yds., $2.00; rubble masonry laid dry, 110 cu. yds., $3.00; rubble masonry laid in cement, 36 cu. yds., $6.00; gravel, 100 cu. yds., 35 cts.; Telford, 100 sq. yds., 35 cts.; shaping, 11,525 sq. yds., 2 cts.; broken stone in place, 2,766 tons, $1.28; 12-in. vitrified clay pipe, 106 lin. ft., 60 cts.; fencing used as guard rail, 550 lin. ft., 20 cts.; side drains, 750 lin. ft., 30 cts.; stone monuments, 20, each, $1.50; total, $5,667.

Bids Received at New Orleans, La., Oct. 10, 1898, for Asphalt Paving in Canal St.

Quantities.		S. W. Alcatraz Asphalt & Const'n Co.	Ayers Asphalt Co.	Barber Asphalt Co.	Belden & Seely.
Canal St., from Delta to Liberty—Roadway:					
Asphalt	42,000 sq. yds.	$2.49	$2.23	$2.10	$2.10
Concrete gutter bottom	100 cu. yds.	1.25	1.75	1.26	1.25
Old curbing relined and reset	7,000 lin. ft.	.10	.14	.12	.10
Cypress lumber, per M ft.	25,000 ft. B.M.	14.00	17.00	15.00	14.75
Bricks, per M	60,000	15.00	16.00	16.00	14.50
Cast iron, per lb.	50,000 lbs.	.02	.02	.02	.01¾
12-in. pipe	2,300 lin. ft.	.36½	.50	.64	.40
18-in. "	1,000 " "	.61½	.74	.99	.65
20-in. "	1,000 " "	.76½	1.27	1.15	.80
24-in. "	900 " "	.97½	1.49	1.41	1.00
30-in. "	1,600 " "	1.77	2.60	2.56	1.90
36-in. "	500 " "	2.73	4.10	3.75	3.00
Concrete in catchbasins, etc., a cu. yd.		4.00	4.75	4.25	4.25
New curb, a sq. ft.		.40	.45	.45	.45
Wheel guards, each		7.50	7.50	9.50	8.00
Total		$114,949	$107,911	$102,353	$98,949
Canal St., from Delta to Liberty—Neutral ground:					
Asphalt	21,000 sq. yds.	$2.15	$1.98	$1.85	$1.70
Belgian blocks	1,000 " "	3.50	3.25	2.50	2.70
Gutter bottom	90 " "	1.25	1.75	1.26	1.25
Cast iron, per lb.	12,000 lbs.	.02	.02	.02	.01¾
3-in. pipe, a lin. ft.	1,000 lin. ft.	.20	.15	.06	.20
12-in. " "		.38	.50	.64	.50
24-in. " "		.97½	1.49	1.41	1.25
30-in. " "		1.77	2.60	2.56	1.90
Concrete, a cu. yd.		4.00	4.75	4.25	4.25
New curbing, a sq. ft.		.40	.45	.45	.45
Old curbing relined and reset, a lin. ft.		.10	.14	.12	.10
Cypress lumber, per M ft.		14.00	17.00	15.00	14.75
Wheel guards, each		7.50	7.50	9.50	8.00
Total		$49,203*	$45,378	$41,763	$38,923

Canal St., from Delta to Liberty—Neutral ground, vitrified brick:		Belden & Seely.
Vitrified brick	21,000 sq. yds.	$2.50
Belgian blocks	1,000 " "	2.90
Gutter bottom	90 " "	1.25
Cast iron	12,000 lbs.	.02
3-in. pipe	1,000 lin. ft.	.20
6-in. " a lin. ft.		.30
8-in. " "		.40
12-in. " "		.50
24-in. " "		1.25
30-in. " "		2.00
Concrete, a cu. yd.		4.00
New curbing, a lin. ft.		.45
Old curbing relined and reset, a lin. ft.		.10
Cypress lumber, per M ft.		14.75
Wheel guards, each		8.00
Total		$55,953

ASPHALT PAVING—Louisville, Ky.—The board of public works received the following bids Sept. 28, 1898, for asphalt paving in Oak and 26th Sts.; total cost, about $100,000; Southwestern Alcatraz & Construction Co. were awarded the contract:

Bidder.	Guarantees—5 yrs.		10 yrs.	
Breckinridge Asphalt Co...	$15.00	No. 1.	$17.76	No. 1.
	15.00	" 2.	17.76	" 2.
S.-W. Alcatraz & Cnstn Co.	18.00	" 1.	24.00	" 1.
	17.00	" 2.	23.00	" 2.
Barber Asphalt Paving Co.	18.70	" 1.	23.50	" 1.
	17.70	" 2.	23.50	" 2.
Assyrian Asphalt Co.......	18.50	" 1.	24.31	" 1.
	17.83	" 2.	22.46	" 2.

BRICK PAVING.—Scranton, Pa.—The following bids were received Sept. 29, 1898, for 5,415 sq. yds. of brick paving on 6-in. gravel or broken stone foundation; Cy. Engr., Jos. P. Phillips:

Items.	George McDonald, Newark, N. J.	Alcatraz Paving Co., Philadelphia, Pa.	Mears & Flynn, Scranton.
Brick paving, a sq. yd.	$1.69	$1.42	$1.64
4x24-in. straight curb, a lin.ft	.69	.47	.56
With tile drain, a lin.ft.	.85	.62	.68
4x24-in. circul'r curb, a lin.ft	1.00	.95	.85
With tile drain, a lin.ft.	1.15	1.10	.97
Redressing curb, a lin. ft....	.30	.10	.37

BROKEN STONE.—Fort Washington, D. C.—Bids were opened Oct. 10, 1898, by Lieut.-Col. Chas. J. Allen, U. S. Engr., for delivering broken stone at Fort Washington, as follows; (1) coarse broken stone, (2) fine broken stone; (3) granolithic broken stone: Chas. G. Smith & Son, Washington, D. C.—(1) $1.32 a cu. yd., (2) $1.32, (3) $1.32; Washington & Potomac River Iron & Land Co., Washington.—(1) $1.24 a cu. yd., (2) $1.19, (3) $1.00.

FILTRATION BEDS.—Concord, Mass.—The following bids were received Sept. 24 for preparing sewage filtration beds for the system in this city; J. W. Maskill was awarded contract; Engr., Leonard Metcalf, 89 State St., Boston:

ASPHALT PAVING.—Chicago, Ill.—Press reports state that the following lowest bids were received by the commissioner of public works Oct. 15, 1898, for asphalt paving in about 39 miles of streets: Bermudez Asphalt Co.—Oak St., $1.65 a sq. yd.; highest bid for same work, $2.37; Schiller St., lowest bid, $1.69; highest, $2.60; Turner Ave., lowest bid, $1.67; highest, $2.65; West Van Buren St., lowest bid, $1.87; highest, $2.65. The Bermudez Asphalt Co. is the lowest bidder in all the figures given, and gives a 10-years' guarantee. Total, about $500,000. L. E. McGann, Comr., is quoted as stating that these are the lowest bids for asphalt paving ever received in Chicago.

GRANITE BLOCK PAVING.—Cincinnati, O.—The following bids were received Oct. 5 for granite block paving in Delhi Ave., from West 6th St. to Garfield Ace.; Ch. Engr., Thos. B. Punshon; Pres. Bd. City Affairs, A. B. Rattermann; Asst. Clk., Jno. D. Harris:

STATE HIGHWAYS.—Newburyport and South Hadley, Mass.—The Massachusetts State Highway Commission, Boston, awarded the following contracts Oct. 6, 1898, for constructing highways in Newburyport and South Hadley, Mass.; Secy., A. B. Fletcher: Newburyport—Michael Cashman, Newburyport—Excavation, 98 cu. yds., 17 cts. a cu. yd.; ledge excavation, 40 cu. yds., 10 cts.; rubble masonry laid dry, 32 cu. yds., $2.50; rubble masonry laid in cement, 32 cu. yds., $3.50; gravel, 600 cu. yds., 29 cts.; Telford, 100 sq. yds., 40 cts. a sq. yd.; shaping, 10,732 sq. yds., 1 ct.; broken stone, in place, 2,760 tons, $1.00; 8-in. vitrified clay pipe, 25 lin. ft., 25 cts. a lin. ft.; fencing used as guard rail, 100 lin. ft., 23 cts.; side drains, 300 lin. ft., 20 cts.; stone monuments, 23, each 50 cts.; catchbasins, 2, each $26.00; 18-in. cast-iron pipe, 60 lin. ft., $1.60; total, $3,693. South Hadley.—Amos D. Bridge, Hazardville, Conn.—Excavation, 400 cu. yds., 20 cts. a cu. yd.; excavation, borrow, 300 cu. yds., 50 cts.; ledge excavation, 10 cu. yds., $1.40; rubble masonry—laid dry, 10 cu. yds., $3.75; laid in cement, 10 cu. yds., $6.00; gravel, 350 cu. yds., 60 cts.; Telford, 10 sq. yds., 60 cts. a sq. yd.; shaping, 7,063 sq. yds., 2½ cts.; broken stone, in place, 1,818 tons, $1.90 a ton; 12-in. vitrified clay pipe, 30 lin. ft., 70 cts. a lin. ft.; fencing used as guard rail, 100 lin. ft., 15 cts.; side drains, 100 lin. ft., 22 cts.; stone monuments, 6, each $1.50; total, $4,255.

Bids Received at Cincinnati, O., Oct. 5, 1898, for Granite Block Paving in Delhi Ave.

Bidder.	Broken stone, 200 cu.yds.	Concrete, 1,150 c. yds.	Crossings, 350 lin.ft.	Curbs, 5,120 lin.ft.	Curb, circular, 100 lin.ft.	Grading, 6,000 c.yds.	Granite, 6,900 sq.yds.	Rolling, 6,900 sq.yds.	Repvg granite, 30 sq.yds.	Total.
W. Fogarty, 2550 Burnet Ave.	$0.01	$2.40	$0.72	$0.82	$1.27	$0.01	$2.35	$0.03	$0.01	$23,822
Van Sandt & Meeds, 518 Walnut St.	.01	2.55	.84	.95	1.40	.01	2.66	.02	.50	26,800
J. M. Quill, 1052 Pine st	.01	2.70	.83	.89	1.35	.01	2.47	.03	.01	25,400
Queen City Const'n Co. represented by E.M.Costello	1.00	1.90	1.00	1.00	1.20	.15	2.30	.02	.30	24,892
H. J. Strack, 1128 Dayton St.	.01	2.00	.85	.93	1.45	.01	2.45	.03	.01	24,678
J. W. Sullivan, 3230 Beresford Ave.	.01	2.40	.80	.85	1.35	.18	2.45	.02	.40	25,664
A. J. Henkel & Bros., 621 Main St.	.01	2.87	.90	.90	1.10	.01	2.48	.03	.40	25,727
T. Evans, 1228 Ida St.	.01	1.55	.75	.85	.01	.01	2.60	.03	.01	24,607
McCarren & Dowson, Cincinnati, O.	.54	2.50	.84	1.05	1.37	.01	2.59	.03	.50	26,943
D. Folz Asphalt Paving Co., 8th and Plum Sts.	1.50	2.60	.85	.92	1.50	.10	2.45	.04	.60	26,247
F. Folz, 134 East Court St.	.01	3.00	.01	.99	.01	.01	2.35	.03	.01	25,008
A. J. Wellmann, 2841 Stanton Ave.	1.00	2.30	.85	1.05	1.00	.01	2.50	.02	.01	26,067
J. A. Eberhardt, 19 and 20 Wiggins Block	1.25	2.50	.80	.87	1.50	.20	2.43	.04	.50	26,267

ROAD ROLLER.—Sheboygan, Wis.—We are informed that the following bids were received Oct. 1, 1898, for furnishing a 28,000-lb. steam road roller, f. o. b. Sheboygan, as advertised in Engineering News; Cy. Engr., C. U. Boley:

O. S. Kelly Co., Springfield, O.	$3,250*
Russell & Co., Massillon, O.	2,500
Optenburg & Sonnenmann, Sheboygan, Wis.	3,250†
Buffalo Pitts Co., Buffalo, N. Y.	3,300

*30,000-lb. roller, $3,350; 33,000-lb., $3,450; 35,000-lb., $3,500; 37,000-lb., $3,700. †Steam steering gear; $3,050 for hand steering gear.

ASPHALT PAVING.—Denver, Colo.—The contract for paving in Champa St. with Alcatraz asphalt is reported to have been let to the Denver Paving Co. at $1.98; total, $71,219.

ASPHALT PAVING.—Kansas City, Mo.—The Barber Asphalt Paving Co., New York, has been awarded the contracts for about 50,000 sq. yds. of asphalt paving in 8 streets at the following prices: 10-year guarantee, $1.85 a yd., $2.24, $2.34; 5-year guarantee, $2.12 a yd.

ELECTRIC LIGHTING.—Philadelphia, Pa.—The following bids were received by the director of public safety, Oct. 4, 1898, for arc lighting for 1899: The Brush Co., which lights the center of the city, and has by far the greatest number of lights, bids for its pole lines, south of Pennsylvania Ave., 30 cts. a light a night; north of Pennsylvania Ave., 31½ cts.; for light supplied through the city's underground cables, 29 cts., and for service on its own cables, 32 cts. The Powelton Electric Co., whose lines cover the district west of the Schuylkill, 32 cts. for its overhead lines, and 29 cts. when supplied over the city's cables. The Manufacturers' Electric Co., which operates between Susquehanna Ave. and Lehigh Ave., east of Broad St., 33 cts. for overhead lines, 29 cts. over the city's cables; 512 lights. The Diamond Electric Co., operating between Montgomery Ave. and Tioga St., 33 cts. for its overhead lines, and 29 cts. for lights supplied over the city's cables; 510 lights. The Suburban Electric Co., supplying 543 lights in the 23d and 35th Wards, 35½ cts. for overhead lines. The Wissahickon Elec-

Bids Received at Concord, Mass., Sept. 24, 1898, for Filtration Beds.

Bidder.	Grubbing, 4 acres.	Excavation—Rock, 10 cu.yds.	Excavation—Earth, 5,000 cu.yds.	Brick mas'ry, 16 cu.yds.	Paving, 75 sq.yds.	Underdrains, lin.ft.	Distribution pipes, 1,600 lin.ft.	Total.
J. W. Maskill, 164 Broadway, Everett, Mass.	$33.00	$1.25	$0.19	$11.00	$0.35	$0.17	$0.11	$1,473
Charles McDermott & Son, 388 Pleasant St., Brockton	80.00	4.00	.16	10.00	.75	.50	.12	1,568
David Hall, Littleton, Mass.	85.00	.25	.20	11.00	.50	.09	.12	1,748
C. W. Prescott, Concord, Mass.	80.00	1.00	.25	9.75	.50	.05	.08	1,902
A. H. Stowell and John Ben, Highlandville, Mass.	80.00	.24	.24	12.00	2.00	.10	.10	2,024
A. E. Weaving, Dorchester; Henry Stupney, Crescent Beach	75.00	2.00	.25	11.50	2.00	.05	.15	2,144
J. J. Braithwaite, Southboro, Mass.	195.00	1.40	.21	10.50	.60	.06	.06	2,153
T. W. Kinser & Sons, 610 Tremont Bldg., Boston	250.00	1.00	.40	12.00	1.50	.25	.15	3,555

tric Light Co., supplying 189 lights in Manayunk, Wissahickon, Roxborough and Falls of Schuylkill, 34 cts. for overhead lines. The Germantown Electric Light Co., supplying Germantown and Chestnut Hill, 35¼ cts. The Cheltenham Electric Light & Power Co., competing for the eastern portion of the 22d Ward in competition with the Germantown company, 36 cts. for overhead lines; 33 cts. when using the city's cables, and 39 cts. for lights supplied over cables controlled by the bidder. The Kensington Electric Light Co., with 650 arc lights, 34 cts. for overhead wires. The Southern Electric Light Co., operating south of South St. to Washington Ave., 30½ cts.; south of Washington Ave., and between the two rivers, 32 cts., all for overhead lines; when using city cables, 29 cts. This year the company supplies 1,251 lights.

SAND AND PEBBLES.—Fort Washington, D. C.—Bids for delivering sand and pebbles at Fort Washington, D.C., were opened by Lieut.-Col. Chas. J. Allen, U. S. Engr., Washington, Oct. 10, 1898, and were as follows; (1) pebbles, (2) sand: Henry Wells, 1210 G St., N. W., Washington, D. C.—(1) 93 cts. a cu. yd.; W. A. Richards, 21 N St., N. W., Washington, D. C.—(1) 99 cts., (2) 88c. a cu. yd.; John B. Lord, 17th St. wharf, Washington, D. C.—(1) 90 cts., (2) 80 cts.

PIPE SEWERS.—Albany, N. Y.—The following contracts were let Oct. 17, 1898, for laying vitrified pipe sewers: Second St.—Contract let to Michael F. Dollard: 15-in. pipe sewer, 40 lin. ft., $1.35 a lin. ft.; 12-in., pipe sewer, 748 lin. ft., $1.32; 12-in. square box, 100 ft., 68 cts.; 6-in. pipe sewer, 1,090 lin. ft., 12 cts.; 12-in. Y's, 70 ft., $2.94; manhole, $40.00; lamphole, $12.50; trenches, 1,090 lin. ft., 45 cts. a lin. ft.; 6-in. bends, 68 ft., 40 cts.; total, $2,016. Third, Thornton and Judson Sts.—Awarded to John Doyle, Albany; 15-in. pipe, 337 lin. ft., $2.25 a lin. ft.; 12-in. pipe, 483 lin. ft., $2.00; 12-in. square wooden box, 127 ft., $1.25; 6-in. pipe, 982 lin. ft., 20 cts.; 15-in. Y's, 22 ft., $4; 12-in., 45 ft., $3; manholes, 2, each $65; lamphole, $20; trench, 982 lin. ft., 70 cts. a lin. ft.; 6-in. bends, 67 ft., 50 cts.; total, $3,173.

LEVEE WORK.—Dayton, O.—The following bids were received Oct. 3 for enlarging the Riverdale levee from Main St. to River St., etc.:

LEAD PIPE—St. Paul, Minn.—Crane & Ordway have been awarded the contract for furnishing seven tons of lead pipe at $4.50 a 100 lbs.

ASPHALT PAVING—Schenectady, N. Y.—We are informed that the contract for 2,000 sq. yds. of asphalt paving, etc., in Summit Ave. has been let to the Metropolitan Paving & Construction Co., Schenectady, at $2.27½ a sq. yd.; curbing, 60 cts. a ft. The same company has the contract for 14,000 yds. of asphalt paving in Franklin St. at $2.27.

ASPHALT PAVING.—Independence, Mo.—The Columbia Construction Co., Syracuse, N. Y., has been awarded the contract for 8,500 sq. yds. of asphalt paving at $1.85 a sq. yd. Mayor, S. H. Woodson; Cy. Engr., M. Pendleton.

SIDEWALKS.—Toledo, O.—James H. Horan has been awarded contracts by the sidewalk committee of the council for laying plank walks at 23¼ cts. a ft. for 6-ft. walks and 15½ cts. for 4-ft. walks. C. Peck & Son were awarded contracts for stone walks at 12¾ cts. a sq. ft.

BRICK PAVING.—Council Bluffs, Ia.—Wickham & Co. have been awarded the contract for paving certain streets with Council Bluff brick in top and bottom courses at $1.098 a sq. yd.

BRICK AND CEDAR BLOCK PAVING.—Detroit, Mich.—Henry Merdian has been awarded the contract for Trimble brick paving in Second St. at $1.57 a sq. yd.; Liphardt & Winterhalter have the contract for paving in Stanley Ave. with cedar blocks at $1.46 a yd.

INDUSTRIAL NOTES.

THE OHIO BRASS CO., Mansfield, O., has just opened an office at 39 Cortlandt St., New York, in charge of Mr. R. A. Byrns, formerly with the Walker Co., Cleveland.

THE JEANESVILLE IRON WORKS, Jeanesville, Pa., has an order, according to report, for an electric power mine pump of 600 ft. lift for the Moon Anchor Gold Mining Co., Cripple Creek, Colo.

Bids Received at Dayton, O., Oct. 3, 1898, for Enlarging the Riverdale Levee.

Bidder.	Stone masonry: Old, 472 perches.	Stone masonry: New, 200 perches.	Slope-wall masonry, 77 perches.	F'ndat'n timber, 30,887 ft. B.M.	Filling, 13,720 cu. yds.	Lump bid: Filling.	Lump bid: Masonry, etc.	Total.
Geo. R. Hively	$7.00	$4.00	$3.00	$20.00	$0.16¾	$2,308	$4,953	$7,261
E. Brentlinger	6.40	6.40	3.00	15.00	.24½	3,361	4,995	8,357
Bruno Ritty	6.50	6.50	4.00	20.00	...	.....	5,294	.....
O'Connor & Kirchner	8.00	3.00	4.00	25.00	.24½	3,361	5,456	8,818
Armantrout & Spohr	...	...	...	.....	.15½	2,127	.....	.....
Reid & Co.	...	...	...	.....	.17½	2,401	.....	.....
David Beard	...	...	...	.....	.23½	3,224	.....	.....

IRRIGATION CANAL—Salt Lake City, Utah.—The letting of the contract for building the dam of the Davis and Weber Counties Canal Co. was noted in our issue of Sept. 1. Since then the Andrews Bridge Co., of Salt Lake City, has withdrawn from the contract, and Perham Bros. & Parker, of Montana, have signed the bonds for the contract and are actively at work. Following are the contract prices: Excavating and placing rock in the body of the dam and face wall, 80 cts. a cu. yd. in place; funnel, $8 a cu. yd. excavated; asphalt concrete, $10 a cu. yd.; Portland cement concrete, $8 a cu. yd.; rough rubble masonry in cement mortar, $10 a cu. yd. The steel core and other work was let in a lump sum. The total amount of the contract is $27,910. The dam is located in a solid rock gorge, 52 ft. between walls at the bottom and 90 ft. at the top, and it is to be 68 ft. high.

LEVEE WORK—Port Allen, La.—Donovan & Daley submitted the lowest bid, Sept. 21, 1898, at 22.90 cts. a cu. yd., for constructing the Allendale levees, in West Baton Rouge. The bids were rejected.

LEVEE WORK—New Orleans, La.—The following bids were received by the U. S. Engineers, Sept. 22, 1898, for levee work in the districts of Lafourche and Atchafalaya: Lafourche Levee—Hymelia to Killona—Hayes & Bros., 11.75 cts. a cu. yd.; Donovan & Daley, 12.70 cts.; J. A. Andrews & Sons, 15.50 cts. Pelican to Flagtown—Hayes & Bros., 12.75 cts.; Donovan & Daley, 16.90 cts.; J. A. Andrews & Sons, 16 cts. Lone Star—Hayes & Bros., 18 cts.; J. A. Andrews & Sons, 23 cts. Louisa—Hayes & Bros., 16 cts.; Donovan & Daley, 13.90 cts.; J. A. Andrews & Sons, 14 cts. Coopersville—Hayes & Bros., 18 cts.; Donovan & Daley, 17 cts.; J. A. Andrews & Sons, 14.75 cts. Atchafalaya Levee—Hermitage—B. O'Brien, 33 cts.; Donovan & Daley, 35 cts. Beaulieu to Antonio—M. L. Linan, 10.97 cts.; Thomas Whelan, 14 cts.; I. R. Bobbit, 13.50 cts.; B. O'Brien, 14 cts.; George Byrne, 12.40 cts.; Donovan & Daley, 13.70 cts.; Hearn & O'Connor, 12.95 cts.; J. A. Andrews & Sons, 19 cts. Missouri—I. R. Bobbit, 14.50 cts.; B. O'Brien, 15 cts.; G. Byrne, 16.50 cts.; Donovan & Daley, 14.90 cts.; J. A. Andrews & Sons, 19.50 cts. Australia—M. L. Linan, 10.95 cts.; G. Bryne, 16.50 cts.; Donovan & Daley, 17.90 cts.; J. A. Andrews & Sons, 16.50 cts.

LEVEE WORK—New Orleans, La.—The following bids were received by the State Engineers, Sept. 23, 1898, for levee work in the Grand Prairie district, etc., (1) being for the Grand Prairie district and (2) for the Rosehill Highland: Thos. B. Cleary (1), 12.90 cts.; M. Michell (1), 13¾ cts.; Geo. Jurgen and P. Lyon (1), 13.75 cts.; Donovan & Daley (2), 16.39 cts.; I. R. Bobbitt (2), 16¾ cts.; Jos. Hingle, Jr. (1), 11¼ cts.; Felix S. Hingle (1), 13½ cts.; Cosse & Schavot (1), 11.99 cts.

LEVEE WORK—New Orleans, La.—The U. S. Engineers received the following bids, Sept. 28, 1898, for certain levee work: Esperanza, sections 1 to 4—B. O'Brien, 19.90 cts.; Bush Bros., 23.125 cts. Ashley, sections 1 to 3—John Scott & Sons, 11.36 cts.; H. J. Loonan, 12.70 cts.; Donovan & Daley, 13.70 cts.; B. O'Brien, 13.73 cts.; Bush Bros., 12.74 cts.; Jos. R. Mariou, 11.94 cts. Ashley, sections 4 to 6—John Scott & Sons, 11.36 cts.; Donovan & Daley, 13.70 cts.; B. O'Brien, 12 cts.; Bush Bros., 12.74 cts. Ashley, sections 7 to 10—John Scott & Sons, 11.36 cts; Donovan & Daley, 13.70 cts.; B. O'Brien, 13.98 cts.; Bush Bros., 13.90 cts. Ashley, sections 11 to 13—John Scott & Sons, 11.36 cts.; Donovan & Daley, 13.70 cts.; B. O'Brien, 11.98 cts.; Bush Bros., 12.90 cts.

BRICK PAVING—Erie, Pa.—The following contract has been let to John McCormick & Son for brick paving, etc., in 17th St.: Mack No. 1 plain brick, $1.72 a sq. yd. complete, including grading, foundation and curbing, and $30 each manhole; 30 cts a sq. ft. 6-in. pipe. Other materials: Park No. 1 vitrified, $1.75; Mack, repressed, $1.75, and Canton, repressed, red granite, $1.72.

BRICK PAVING—Toledo, O.—Geo. H. Cole submitted the lowest bid, Oct. 12, 1898, for brick paving in Scott St., at $1.44; total, $3,000. H. J. Jenneson submitted the lowest bid for paving in Oak St. at $1.47 a sq. yd. The high bid on this work was at $2 a sq. yd. Total for Jenneson's bid, $5,000. H. P. Streichen was lowest bidder at $1.34 for the paving of Sixth St., from Main St. to Kelsey Ave.; total, about $5,500.

THE HARRISBURG FOUNDRY & MACHINE WORKS, Harrisburg, Pa., will soon begin work, it is reported, on a large contract for steam engines and boilers for a woolen mill at Tien-Tsin, near Pekin, China.

THE NATIONAL TUBE WORKS CO., McKeesport, Pa., is announced to have contracted to furnish about 35 miles of pipe to the Kentucky Oil & Pipe Line Co., for its new line from Slick Ford to Somerset, Ky.

THE PLAYFORD STOKER CO., Cleveland, O., has the contract for six 250-HP. automatic stokers for the Apollo Iron & Steel Co., Vandergrift, Pa., and for two 250-HP. stokers to be installed in the Allegheny, Pa., water-works.

THE UTICA ELECTRIC MFG. & SUPPLY CO., Utica, N. Y., has a contract from the New York Mills Co., New York Mills, N. Y., for a light dynamo, switchboard and 11 arc and 200 incandescent lamps, according to report.

HALLSTED & McNAUGHER, civil engineers and inspectors of iron and steel for structural purposes, and Robert W. Hunt & Co., associates, have removed their offices from 80 Broadway to the Empire Bldg., 71 Broadway, New York.

THE SNOW STEAM PUMP WORKS, Buffalo, N. Y., has the contract for the pumps for the new Russian battleship, Russian cruiser and the American battleship "Maine." Mr. Lewis S. Silva, 126 Liberty St., New York, is Eastern representative of the company.

WM. B. SCAIFE & SONS, Pittsburg, have the contract to build a new steel frame shop building and other extensions to the plant of the Pennsylvania Car Wheel Co. The firm also has the contract to erect a steel tipple building and engine house for the Washington Coal & Coke Co., near Dawson, Pa.

THE ITHACA GUN CO., Ithaca, N. Y., is reported to have purchased the entire plant of the Wilkesbarre Arms Co., Wilkes-Barre, Pa., manufacturers of the Wilkesbarre and Parry guns, and will move the plant to Ithaca, making the former company's plant, it is said, one of the largest of its kind in the world.

THE RICE & SARGENT ENGINE CO., Providence, R. I., recently supplied to the Brown & Sharpe Mfg. Co., of the same city, a 350-HP. cross-compound condensing Rice & Sargent engine for use in the main machine shop. This engine takes the place of two non-condensing Corliss type engines, built in 1872, and it is claimed that the change will effect a saving of 10 tons of coal a week.

THE CLONBROCK STEAM BOILER CO., Brooklyn, N. Y., has been successful in its suit against Thos. J. Lawler, of the Columbian Steam Boiler Works, for infringement of its patents on the Climax boiler. In an opinion handed down by Judge Thomas in the U. S. Circuit Court for the Eastern District of New York, on Oct. 6, the patents of Morrin & Scott 309,727 and Morrin's patents 463,307 and 463,308 covering the construction adopted in the "Climax" boiler were sustained. The boilers constructed by the Columbian Works for the Brooklyn Edison Co. were declared infringements.

THE DELAWARE ELECTRIC & SUPPLY CO., Wilmington, Del., has the following orders: A 60-HP. boiler and a 25-HP. engine for J. E. Rhoades & Son; two large pumps, several hydrants and two 40-HP. boilers for the water-works at Pocomoke City, Md.; a 15-HP. boiler to go to Hockessin, Del.; a 25-HP. boiler for the Fibre Specialty Co., Hockessin, Del.; 2,150 ft. of 2½-in. fire hose for the Eddystone Mfg. Co., Eddystone, Pa.; 500 ft. of the same for the Jackson & Sharp Co., Wilmington, Del.; 200 ft. of the same for the Diamond Ice Co., and 400 ft. of the same for the Harlan & Hollingsworth Co., Wilmington.

THE FEDERAL STEEL CO., Cleveland, O., is announced in press reports to have completed its organization by the election of its permanent officers and is to establish a large shipbuilding plant in or near New York for the construction of steel merchant vessels and battleships, cruisers and other war vessels. The new company has a capital of $200,000,000, and has been formed by the consolidation of the Minnesota Iron Co., the Illinois Steel Co., the Elgin, Joliet & Eastern R. R. Co. and the Lorain Steel Co. The officers are: Pres., Mr. E. H. Gary, Chicago, and Secy. and Treas., Mr. Richard Trimble, New York.

THE VULCAN IRON WORKS, Chicago, has received orders from the Chicago, Burlington & Quincy R. R. Co. for the steam operating machinery for its new bridge at Quincy, Ill.; from the Chicago & Northwestern Ry. Co. for the gasoline operating machinery and the turntable machinery for its bridge over the Kinnickinnic River, at Milwaukee, Wis., and also from the latter company for the hand-operating machinery and turntable for its bridge at Oshkosh, Wis. The Vulcan Iron Works has about finished seven sluice gates for the Cincinnati Water-Works, and has an order from the city of Chicago for a 7-ft. tunnel-gate.

THE ABENDROTH & ROOT MFG. CO., 28 Cliff St., New York, manufacturers of Root's spiral riveted pipe, reports a number of large orders recently for this pipe for water-works. Among recent shipments are the following: Sheely & O'Shee Co., contractors, Lincoln, Neb., 12,000 ft., which will be used in extending the water-works at Lanesboro, Minn.; about 10,000 ft. to Milledgeville, Ill., and 15,000 ft. to the city of Augusta, Wis. The U. S. Water & Steam Supply Co., contractors, Kansas City, Mo., has placed an order for about 5,000 ft. of pipe to be used at Concordia, Mo., and 6,500 ft. have been ordered by J. L. White, contractor, Wyoming, Ill.

THE KENNEY CO., 72 Trinity Place, New York, reports that the War Department has ordered the installation of 63 Kenney flushometers in the transport "Mohawk," now being overhauled at the Bath Iron Works, Bath, Me. The Navy Department has also given the company a second order for flushometers to be used in its building in Washington, D. C. The company also reports that the Philadelphia Board of Health, after a thorough investigation, has amended the building laws so as to permit the installation of the Kenney system, by which one tank is used to supply one or more water-closets, instead of requiring individual tanks.

THE NEW BRITAIN MACHINE CO., New Britain, Conn., has just furnished two 25-HP. steam engines of the Case type for the United States Government, to be direct connected to C. & C. dynamos. One of the smaller sizes of these engines is now being used at Santiago, Cuba, for driving a search light dynamo on a tug, by means of which the salvage work in charge of Naval Constructor Hobson is being expedited. The company has recently shipped several of its chain saw mortises to the Navy Yard, at Brooklyn, N. Y., and Mare Island, Cal., and at present is engaged in completing an order for similar machines for government dock yards at Devenport and Chatham, England.

THE GOUBERT MFG. CO., New York, manufacturer of the Goubert feed-water heater, states that it is exceedingly busy at present and that it has the following orders: One 3,000-HP. heater for a pulp mill of the New York & Pennsylvania Co.; one 3,000-HP. heater for the Cleveland Ry. Co., Cleveland, O.; one 5,000-HP. auxiliary heater for the Metropolitan St. Ry. Co., New York, making 35,000 HP. now being built for that company alone; a 3,000-HP. heater has just been delivered to the People's Electric Light Co., Newark, N. J. These orders are in addition to regular calls for heaters of smaller sizes, among the latter being 1,000 HP. for the Schenectady Ry. Co., Schenectady, N. Y., and 1,800 HP. for the Citizens' Light & Power Co., Houston, Tex.

THE EDWARD P. ALLIS CO., Milwaukee, Wis., reports that among recent orders are two vertical cross compound direct-connected engines, with cylinders 38 and 76×48, for the Metropolitan West Side Elevated Ry. Co., of Chicago, which company for several years has been using four Allis engines of similar design. The Metropolitan Sewage Commission of Boston has recently ordered three more sewage pumping engines, similar to those supplied the commission during the past few years. The shops of the company are very busy, and among the orders in hand are four pair of vertical cross compound blowing engines with steam cylinders 42 and 80×60, air cylinders 87×60. It is also building two pair of similar blowing engines for the Carnegie Steel Co., with steam cylinders, 5 and 96×60; air cylinders, 100×60. The company states that it has recently had to decline a number of orders offered, as it was unable to meet the delivery desired.

THE WILLIAMS PATENT CRUSHER & PULVERIZER CO., St. Louis, Mo., has removed its general eastern office from Philadelphia to the Washington Life Bldg., New York, in addition to having also just taken more commodious quarters in Philadelphia. The company is making a specialty of crushers and pulverizers for reducing limestone, cement, clinker, phosphate rock, shale, clays, bones, etc., in addition to making a bark mill for tanners and extract manufacturers. The company has recently installed mills in the following plants: Lawrence Cement Co., Siegfried, Pa.; Kelly Island Lime & Transport Co., Kelly Island, O.; Vanner Cement Co., Louisville, Ky.; Portland Cement Co. of Utah, Salt Lake City; Virginia & Carolina Chemical Co., Richmond, Va.; Bradley Fertilizer Co., Boston; Philadelphia and Boston Face Brick Co., Boston; Standard Flint & Spar Co., Frenchtown, N. J., and Cleveland Dryer Co., Cleveland, O. Swift & Co., of Chicago has just placed orders for three more mills for bone grinding, and the Philadelphia Hydraulic Press Brick Co., Philadelphia, has ordered three pulverizers. The company has also recently sold mills to the following tanners: A. T. Prindle & Co., Hornellsville, N. Y.; J. S. Young Co., Baltimore, Md. (two mills); Smoot & Co., Alexandria, Va. Additions to its works, made necessary by the increasing demand for these machines, have just been completed by the Williams company. The officers are: Pres., Milton F. Williams; Vice-Pres., Hoyt H. Green; Secy. and Treas., Geo. F. Cottrill.

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